



# STIC Search Report

## Biotech-Chem Library

STIC Database Tracking Number: 153406

TO: Emily M Le  
Location: 3c35/3c18  
Art Unit: 1648  
Monday, May 16, 2005

Case Serial Number: 08/869386

From: Noble Jarrell  
Location: Biotech-Chem Library  
Rem 1B71  
Phone: 272-2556

Noble.jarrell@uspto.gov

### Search Notes

#### Protein Sequence Searches - February 2005

All of the sequence databases on ABSS have recently been updated.

- Please note that the curators of the UniProt database have purged some temporary accession numbers from the most recent version of UniProt. These sequences have been assigned new permanent accession numbers. The new UniProt record may not contain the previous temporary accession number.
- If you encounter an accession number from an older search run against UniProt (results file extension .rup) that can no longer be found in the database, the permanent record with the new accession number can be found by searching the old accession number in the UniProt Protein Archive database (UniPARC) at:

<http://www.pir.uniprot.org/database/archive.shtml>

If you have any questions regarding this information or your results, please contact any STIC searcher.

**When submitting sequence search results for scanning into IFW, please include a copy of this attachment to assist any future Examiners or members of the public who may encounter UniProt temporary accession numbers.**



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153406 CRFE

Jarrell, Noble

**From:** Le, Emily  
**Sent:** Monday, May 16, 2005 12:04 PM  
**To:** Jarrell, Noble  
**Subject:** FW: Sequence Search: 08869386

update:

Please provide a search for the following:

1. RAFVTIGK, which is SEQ ID NO: 5 in the above case.
2. SEQ ID NO: 1
3. SEQ ID NO: 3

Please also limit the size to no more than 25 amino acids.

Thanks, Noble.

Emily

-----Original Message-----

**From:** Le, Emily  
**Sent:** Friday, May 13, 2005 4:13 PM  
**To:** Jarrell, Noble  
**Subject:** Sequence Search: 08869386

Noble,

Please provide a search for the following:

1. RAFVTIGK

Please also limit the size to no more than 25 amino acids.

Thanks!

Emily Le  
Office, Rem 3C35  
Mailbox, Rem 3C18  
Tel., 2-0903

Noble

May 16 2005

3 NA, computer

10 prep

10 onl

commercial

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GenCore version S.1.6  
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: May 16, 2005, 07:26:50 ; Search time 167 Seconds  
(without alignments)  
24.531 Million cell updates/sec

Title: SEQ1

Perfect score: 39

Sequence: 1 rafvtgk 8

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 16988

Minimum DB seq length: 0

Maximum DB seq length: 25

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Uniprot\_03.\*

1: uniprot\_sprot.\*

2: uniprot\_trembl.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

| Result No. | Score | Query Match | Length | ID     | Description        |
|------------|-------|-------------|--------|--------|--------------------|
| 1          | 24    | 61.5        | 22     | Q6U2M7 | Q6u2m7 sechium edu |
| 2          | 23    | 59.0        | 11     | Q7S0C5 | Q7s0c5 neurospora  |
| 3          | 23    | 59.0        | 16     | Q6XA08 | Q6xa08 equus cabal |
| 4          | 22    | 56.4        | 10     | Q76V19 | Q76v19 lactococcus |
| 5          | 22    | 56.4        | 10     | Q9QVK8 | Q9qv8 mus sp. mep  |
| 6          | 22    | 56.4        | 17     | Q9SMC7 | Q9smc7 lycopersico |
| 7          | 22    | 56.4        | 21     | Q9R890 | Q9r890 chlamydia t |
| 8          | 22    | 56.4        | 23     | Q9ZG66 | Q9zg66 chlamydia t |
| 9          | 22    | 56.4        | 25     | Q9TRE1 | Q9tre1 ovis aries  |
| 10         | 22    | 56.4        | 25     | O10481 | O10481 human immun |
| 11         | 21    | 53.8        | 13     | Q6TU17 | Q6tui7 ascaris suu |
| 12         | 21    | 53.8        | 14     | Q27373 | Q27373 trypanosoma |
| 13         | 21    | 53.8        | 15     | Q26825 | Q26825 trypanosoma |
| 14         | 21    | 53.8        | 16     | Q47605 | Q47605 escherichia |
| 15         | 21    | 53.8        | 17     | Q6EML4 | Q6eml4 meleagris g |
| 16         | 21    | 53.8        | 17     | Q6EML5 | Q6eml5 gallus gall |
| 17         | 21    | 53.8        | 23     | Q6U2M9 | Q6u2m9 momordica c |
| 18         | 21    | 53.8        | 24     | Q6U2N2 | Q6u2n2 citrullus l |
| 19         | 20    | 51.3        | 9      | Q9TVP1 | Q9tvf1 trypanosoma |
| 20         | 20    | 51.3        | 11     | Q87882 | Q87882 mycobacteri |
| 21         | 20    | 51.3        | 15     | Q86128 | Q86128 vesicular s |
| 22         | 20    | 51.3        | 19     | Q91SF3 | Q91sf3 feline cali |
| 23         | 20    | 51.3        | 19     | Q91SF5 | Q91sf5 feline cali |
| 24         | 20    | 51.3        | 19     | Q91SF7 | Q91sf7 feline cali |
| 25         | 20    | 51.3        | 20     | Q9TWP7 | Q9twp7 leishmania  |
| 26         | 20    | 51.3        | 21     | Q09166 | Q09166 staphylococ |
| 27         | 20    | 51.3        | 21     | Q8QXS4 | Q8qxs4 polyomaviru |
| 28         | 20    | 51.3        | 21     | Q8QXS5 | Q8qxs5 polyomaviru |
| 29         | 20    | 51.3        | 21     | Q8QXS6 | Q8qxs6 polyomaviru |
| 30         | 20    | 51.3        | 21     | Q8QXS8 | Q8qxs8 polyomaviru |
| 31         | 20    | 51.3        | 22     | Q7S0M0 | Q7s0m0 neurospora  |

|    |    |      |    |   |        |                    |
|----|----|------|----|---|--------|--------------------|
| 32 | 20 | 51.3 | 24 | 2 | Q945F1 | Q945f1 cicer ariet |
| 33 | 20 | 51.3 | 24 | 2 | Q9QW22 | Q9qw22 rattus sp.  |
| 34 | 20 | 51.3 | 24 | 2 | Q9QW23 | Q9qw23 rattus sp.  |
| 35 | 19 | 48.7 | 10 | 2 | Q7MLV8 | Q7mlv8 nicotiana p |
| 36 | 19 | 48.7 | 12 | 2 | Q9BR06 | Q9br06 homo sapien |
| 37 | 19 | 48.7 | 14 | 2 | Q7S9F5 | Q7s9f5 neurospora  |
| 38 | 19 | 48.7 | 16 | 2 | Q9UCJ7 | Q9ucj7 homo sapien |
| 39 | 19 | 48.7 | 18 | 2 | Q7Y4G6 | Q7y4g6 lactococcus |
| 40 | 19 | 48.7 | 20 | 2 | Q9PWQ4 | Q9pwq4 gallus gall |
| 41 | 19 | 48.7 | 21 | 2 | Q8HS54 | Q8hs54 arabidopsis |
| 42 | 19 | 48.7 | 21 | 2 | Q8QYS3 | Q8qys3 polyomaviru |
| 43 | 19 | 48.7 | 21 | 2 | Q8QYS7 | Q8qys7 polyomaviru |
| 44 | 19 | 48.7 | 21 | 2 | Q8QYS9 | Q8qys9 polyomaviru |
| 45 | 19 | 48.7 | 21 | 2 | Q8QYT0 | Q8qyt0 polyomaviru |

#### ALIGNMENTS

##### RESULT 1

|        |   |      |    |     |
|--------|---|------|----|-----|
| Q6U2M7 | PRELIMINARY;  | PRT; | 22 | AA. |
| AC     | Q6U2M7;   |      |    |     |
| DT     | 05-JUL-2004 (TrEMBLrel. 27, Created)                                    |      |    |     |
| DT     | 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)                       |      |    |     |
| DT     | 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)                     |      |    |     |
| DE     | Galactinol synthase (BC 2.4.1.123) (Fragment).                          |      |    |     |
| GN     | Name=GAS1;  |      |    |     |
| OS     | Sechium edule.  |      |    |     |
| OC     | Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;      |      |    |     |
| OC     | Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;    |      |    |     |
| OC     | eurosid1; Cucurbitales; Cucurbitaceae; Sechium.                         |      |    |     |
| OX     | NCBI_TaxID=184140;  |      |    |     |
| RN     | [1]   |      |    |     |
| RP     | SEQUENCE FROM N.A.  |      |    |     |
| RX     | MEDLINE=22975109; PubMed=14526110; DOI=10.1104/pp.103.027714;           |      |    |     |
| RA     | Ayre B.G., Blair J.E., Turgeon R.;                                      |      |    |     |
| RT     | "Functional and phylogenetic analyses of a conserved regulatory         |      |    |     |
| RT     | program in the phloem of minor veins."                                  |      |    |     |
| RL     | Plant Physiol. 133:1229-1239(2003).                                     |      |    |     |
| DR     | EMBL; AV379782; AAQ74884.1; "   |      |    |     |
| DR     | GO; GO:0047216; F:inositol 3-alpha-galactosyltransferase acti. . ; IEA. |      |    |     |
| DR     | GO; GO:0016757; F:transferase activity, transferring glycosyl. . ; IEA. |      |    |     |
| KW     | Glycosyltransferase; Transferase.                                       |      |    |     |
| FT     | NON TER 22  |      |    |     |
| SQ     | SEQUENCE 22 AA; 2295 MW; A6673B5BFD06430C CRC64;                        |      |    |     |

Query Match 61.5%; Score 24; DB 2; Length 22;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVT 5

|||||

18 RAFVT 22

##### RESULT 2

|        |   |      |    |     |
|--------|---|------|----|-----|
| Q7S0C5 | PRELIMINARY;  | PRT; | 11 | AA. |
| ID     | Q7S0C5  |      |    |     |
| AC     | Q7S0C5;   |      |    |     |
| DT     | 01-MAR-2004 (TrEMBLrel. 26, Created)                                |      |    |     |
| DT     | 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)                   |      |    |     |
| DT     | 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)                 |      |    |     |
| DE     | Predicted protein.  |      |    |     |
| GN     | Name=NCU09984.1;  |      |    |     |
| OS     | Neurospora crassa.  |      |    |     |
| OC     | Eukaryota; Fungi; Ascomycota; Pezizomycotina; Sordariomycetes;      |      |    |     |
| OC     | Sordariomycetidae; Sordariales; Sordariaceae; Neurospora.           |      |    |     |
| OX     | NCBI_TaxID=5141;  |      |    |     |
| RN     | [1]   |      |    |     |
| RP     | SEQUENCE FROM N.A.  |      |    |     |
| RC     | STRAIN=OK74A;   |      |    |     |
| RA     | Galanagan J.E., Calvo S.E., Borkovich K.A., Selker E.U., Read N.D., |      |    |     |

```

RA Jaffe D., Fitzhugh W., Ma L.-J., Smirnov S., Purcell S., Rehman B.,
RA Elkins T., Engels R., Wang S., Nielsen C.B., Butler J., Endrizzi M.,
RA Qui D., Iankiev P., Pedersen D., Nelson M., Washburne M.,
RA Selitrennikoff C.P., Kinsey J.A., Braun E.L., Zelter A., Schulte U.,
RA Kothe G.O., Jedd G., Mewes W., Staben C., Marcotte E., Greenberg D.,
RA Roy A., Foley K., Naylor J., Thomann N., Barrett R., Gnerre S.,
RA Kamal M., Kamvysselis M., Mauceli E., Bielke C., Rudd S., Frishman D.,
RA Krystofova S., Rasmussen C., Metzenberg R.L., Perkins D.D., Kroken S.,
RA Cogoni C., Macino G., Catchside D., Li W., Pratt R.J., Omani S.A.,
RA DeSouza C.C., Glass L., Orbach M.J., Berglund J., Voelker R.,
RA Varden O., Planann M., Sailer S., Dunlap J., Radford A., Aramayo R.,
RA Natvig D.O., Alex L.A., Mannhaupt G., Ebbole D.J., Freitag M.,
RA Paulsen I., Sachs M.S., Landier E.S., Nussbaum C., Birren B.,
RA "The Genome Sequence of the Filamentous Fungus Neurospora crassa."
RL Nature 0:0-0(2003).
CC -|- CAUTION: The sequence shown here is derived from an
CC EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is
CC preliminary data.
DR EMBL; AABX01000510; EAA28761.1; -.
SQ SEQUENCE 11 AA; 1251 MW; 4BF2534E31B2C9C3 CRC64;

Query Match 59.0%; Score 23; DB 2; Length 11;
Best Local Similarity 80.0%; Pred. No. 6.1e+02;
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 3 FVTIG 7
Db 5 FVTIG 9

RESULT 3
Q6XA08 PRELIMINARY; PRT; 16 AA.
AC Q6XA08;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE Cytochrome c oxidase IV subunit (Fragment).
GN Name=COXIV;
OS Equus caballus (Horse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
OX NCBI_TaxID=9796;
RN [1]
RP SEQUENCE FROM N.A.
RA Takafuji V.A., Crisman M.V., Seat K.L., Sharova L.V., Ward D.L.,
RA Howard R.D.;
RL Submitted (FEB-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY246701; AAP78686.1; -.
FT NON_TER 16 16
SQ SEQUENCE 16 AA; 1839 MW; 70E9C10DD96C2B74 CRC64;

Query Match 59.0%; Score 23; DB 2; Length 16;
Best Local Similarity 62.5%; Pred. No. 8.6e+02;
Matches 5; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8
Db 5 RVFSLIGK 12

RESULT 4
Q76VI9 PRELIMINARY; PRT; 10 AA.
AC Q76VI9;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE Lysin (Fragment).
GN Name=lysA;
OS Lactococcus delbrueckii bacteriophage LL-H.
OC Viruses.
OX NCBI_TaxID=12348;

RN SEQUENCE FROM N.A.
RP MEDLINE=96209253; PubMed=8633887;
RA Mikonen M., Dupont L., Alatosava T., Ritzenthaler P.;
RT "Defective site-specific integration elements are present in the
RT genome of virulent bacteriophage LL-H of Lactobacillus delbrueckii.";
RA Appl. Environ. Microbiol. 62:1847-1851(1996).
RN [2]
RP SEQUENCE FROM N.A.
RA Mikonen M., Vuoristo J., Alatosava T.;
RT "Ribosome binding site consensus sequence of Lactobacillus delbrueckii
RT subsp. lactis bacteriophage LL-H.";
RA FEMS Microbiol. Lett. 116:315-320(1994).
RN [3]
RP SEQUENCE FROM N.A.
RA Vasala A., Valkkila M., Caldeney J., Alatosava T.;
RT "Genetic and biochemical characterization of the Lactobacillus
RT delbrueckii subsp. lactis bacteriophage LL-H lysin.";
RA Appl. Environ. Microbiol. 61:4004-4011(1995).
RN [4]
RP SEQUENCE FROM N.A.
RA Mikonen M., Dupont L., Alatosava T., Ritzenthaler P.;
RT "Complex DNA rearrangements in the att-integration genome regions in
RT related virulent and temperate phages of Lactobacillus delbrueckii.";
RL Submitted (JUN-1996) to the EMBL/GenBank/DBJ databases.
DR EMBL; I42315; AAB06218.1; -.
FT NON_TER 1 1
SQ SEQUENCE 10 AA; 1162 MW; 926B8D41B2C9CB1A CRC64;

Query Match 56.4%; Score 22; DB 2; Length 10;
Best Local Similarity 83.3%; Pred. No. 9.5e+02;
Matches 5; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 FVTIGK 8
Db 5 FVTITK 10

RESULT 5
Q9QVK8 PRELIMINARY; PRT; 10 AA.
AC Q9QVK8;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE MEPRIN-METALLOENDOPEPTIDASE (Fragment).
OS Mus sp.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10095;
RN [1]
RP SEQUENCE.
RA MEDLINE=91363409; PubMed=1888759; DOI=10.1016/0167-4838(91)90032-U;
RA Flannery A.V., Macadam G.C., Beynon R.J.;
RT "Immunological characterisation of different meprin species in mice.";
RL Biochim. Biophys. Acta 1079:119-122(1991).
FT NON_TER 1 1
FT NON_TER 10 10
SQ SEQUENCE 10 AA; 1163 MW; DD6436144731B2C9 CRC64;

Query Match 56.4%; Score 22; DB 2; Length 10;
Best Local Similarity 57.1%; Pred. No. 9.5e+02;
Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 AFVTIGK 8
Db 2 AFVTILNE 8

RESULT 6
Q9SMC7
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ID Q9SMC7 PRELIMINARY; PRT; 17 AA.
AC Q9SMC7;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE Putative proline-rich protein (Fragment).
GN Name=ctd5;
OS Lycopersicon esculentum (Tomato).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; asterids;
OC lamiales; Solanales; Solanaceae; Solanum.
OX NCBI_TaxID=4081;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=21323136; PubMed=11430427; DOI=10.1023/A:1010625203485;
RA Hoebrechts F.A., Orzaez D., van der Plas L.H.W., Woltering E.J.;
RT "Changes in gene expression during programmed cell death in tomato
RT cell suspensions.";
RL Plant Mol. Biol. 45:641-654 (2001).
DR EMBL; AJ250000; CAB61884.1; -.
FT NON TER 1
SQ SEQUENCE 17 AA; 1837 MW; E35DE1561000PFDC CRC64;

Query Match 56.4%; Score 22; DB 2; Length 17;
Best Local Similarity 57.1%; Pred. No. 1.5e+03;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 AFVTIGK 8
DB 1 AFIPCGK 7

RESULT 7
Q9R890 PRELIMINARY; PRT; 21 AA.
ID Q9R890;
AC Q9R890;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Hypothetical protein (Fragment).
OS Chlamydia trachomatis.
OC Bacteria; Chlamydiae; Chlamydiales; Chlamydiaceae; Chlamydia.
OX NCBI_TaxID=813;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=L2 434B;
RA Wang L., Steenburg S.D., Zheng Y., Larsen S.H.;
RL Submitted (AUG-1998) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF087312; AAD04087.1; -.
KW Hypothetical protein.
FT NON TER 21
SQ SEQUENCE 21 AA; 2346 MW; 5A282DC334CEB5EF CRC64;

Query Match 56.4%; Score 22; DB 2; Length 21;
Best Local Similarity 57.1%; Pred. No. 1.9e+03;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 RAFVTIG 7
DB 10 RLFLTFG 16

RESULT 8
Q9ZG66 PRELIMINARY; PRT; 23 AA.
ID Q9ZG66;
AC Q9ZG66;
DT 01-MAY-1999 (TrEMBLrel. 10, Created)
DT 01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
DT 01-MAY-1999 (TrEMBLrel. 10, Last annotation update)
DE Virulence protein RGP7-D (Fragment).
OS Chlamydia trachomatis.
OC Bacteria; Chlamydiae; Chlamydiales; Chlamydiaceae; Chlamydia.
OX NCBI_TaxID=813;

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RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=L2 434B;
RA Wang L., Steenburg S.D., Zheng Y., Larsen S.H.;
RL Submitted (AUG-1998) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF087290; AAD04067.1; -.
FT NON TER 23
SQ SEQUENCE 23 AA; 2596 MW; 95DA4A282DC334CE CRC64;

Query Match 56.4%; Score 22; DB 2; Length 23;
Best Local Similarity 57.1%; Pred. No. 2e+03;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 RAFVTIG 7
DB 10 RLFLTFG 16

RESULT 9
Q9TRE1 PRELIMINARY; PRT; 25 AA.
ID Q9TRE1;
AC Q9TRE1;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE PLACENTATION-SPECIFIC BINUCLEATE cell GLYCOPROTEIN=62 kDa major
DE phytohemagglutinin-binding protein.
OS Ovis aries (Sheep).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Caprinae; Ovis.
OX NCBI_TaxID=9940;
RN [1]
RP SEQUENCE
RX MEDLINE=94075364; PubMed=8253801;
RA Atkinson Y.H., Gogolin-Ewens K.J., Hounsell E.F., Davies M.J.,
RA Brandon M.R., Seamark R.F.;
RT "Characterization of placental-specific binucleate call
RT glycoproteins possessing a novel carbohydrate. Evidence for a new
RT family of pregnancy-associated molecules.";
RL J. Biol. Chem. 268:26679-26685 (1993).
DR PIR; B44524; B44524.
SQ SEQUENCE 25 AA; 2778 MW; 1053D1A02B4BA442 CRC64;

Query Match 56.4%; Score 22; DB 2; Length 25;
Best Local Similarity 57.1%; Pred. No. 2.2e+03;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 RAFVTIG 7
DB 17 RGXITIG 23

RESULT 10
O10481 PRELIMINARY; PRT; 25 AA.
ID O10481;
AC O10481;
DT 01-JUL-1997 (TrEMBLrel. 04, Created)
DT 01-JUL-1997 (TrEMBLrel. 04, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Envelope glycoprotein (Fragment).
GN Name=env;
OS Human immunodeficiency virus 1.
OC Viruses; Retroid viruses; Retroviridae; Lentivirus.
OX NCBI_TaxID=11676;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=97255649; PubMed=9100996;
RA Rencher S.D., Lockey T.D., Slobod K.S., Hurwitz J.L.;
RT "Drift from the GPGRAF HIV-1 envelope V3 crown sequence in a North
RT American inner city.";
RL AIDS Res. Hum. Retroviruses 13:527-528 (1997).
DR EMBL; U81241; AAB53843.1; -.

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DR GO: GO:0016021; C: integral to membrane; IEA.  
DR GO: GO:0019028; C: viral capsid; IEA.  
DR GO: GO:0019031; C: viral envelope; IEA.  
DR GO: GO:0005198; F: structural molecule activity; IEA.  
DR InterPro: IPR000777; GP120.  
DR InterPro: IPR011056; Pept\_S24\_S26\_C.  
DR Pfam: PF00516; GP120; 1.  
KW AIDS; Coat protein; Envelope protein; Glycoprotein; Transmembrane.  
FT NON\_TER 1  
FT NON\_TER 25  
SQ SEQUENCE 25 AA; 2801 MW; 25E1B150CD7C14B6 CRC64;  
  
Query Match 56.4%; Score 22; DB 2; Length 25;  
Best Local Similarity 71.4%; Pred. No. 2.2e+03;  
Matches 5; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1 RAFVTIG 7  
Db 18 RAFYTKG 24  
  
RESULT 11  
Q6TUI7 PRELIMINARY; PRT; 13 AA.  
AC Q6TUI7; 2004 (TrEMBLrel. 27, Created)  
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)  
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)  
DE AF17 D (Fragment).  
OS Ascaris suum (Pig roundworm) (Ascaris lumbricoides).  
OC Eukaryota; Metazoa; Nematoda; Chromadorea; Ascaridida; Ascaridoidea;  
OC Ascarididae; Ascaris.  
OX NCBI\_TaxID=6253;  
RN [1]  
RP SEQUENCE FROM N.A.  
RA Nanda J.C., Stretton A.;  
RL Submitted (SEP-2003) to the EMBL/GenBank/DBJ databases.  
DR EMBL; AY396839; AAQ90312.1; -.  
FT NON\_TER 1  
SQ SEQUENCE 13 AA; 1531 MW; 18DA23119D6C79C4 CRC64;  
  
Query Match 53.8%; Score 21; DB 2; Length 13;  
Best Local Similarity 50.0%; Pred. No. 2e+03;  
Matches 4; Conservative 1; Mismatches 3; Indels 0; Gaps 0;  
  
QY 1 RAFVTIGK 8  
Db 2 RNFNFGK 9  
  
RESULT 12  
Q27373 PRELIMINARY; PRT; 14 AA.  
AC Q27373; 1996 (TrEMBLrel. 01, Created)  
DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)  
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)  
DE VSG (14 AA) (Fragment).  
OS Trypanosoma brucei.  
OC Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae; Trypanosoma.  
OX NCBI\_TaxID=5691;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC STRAIN=427;  
RX MEDLINE=87283915; PubMed=3612801;  
RA Timmers H.Th.M., De Lange T., Koeter J.M., Borst P.;  
RT "Coincident multiple activations of the same surface antigen gene in Trypanosoma brucei";  
RL J. Mol. Biol. 194: 81-90 (1987).  
DR EMBL; X05267; CAA28883.1; -.  
DR EMBL; X05266; CAA28882.1; -.  
FT NON\_TER 1  
SQ SEQUENCE 14 AA; 1530 MW; DA5AF6569E9A13DD CRC64;

Query Match 53.8%; Score 21; DB 2; Length 14;  
Best Local Similarity 80.0%; Pred. No. 2.2e+03;  
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
  
QY 2 AFVTI 6  
Db 8 AFVTL 12  
  
RESULT 13  
Q26825 PRELIMINARY; PRT; 15 AA.  
AC Q26825; 1996 (TrEMBLrel. 01, Created)  
DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)  
DT 01-NOV-1996 (TrEMBLrel. 19, Last annotation update)  
DE Variant surface glycoprotein C-terminus (1 is 2nd base in codon) (Fragment).  
OS Trypanosoma brucei.  
OC Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae; Trypanosoma.  
OX NCBI\_TaxID=5691;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC STRAIN=427;  
RX MEDLINE=87060970; PubMed=3783693;  
RA Bernards A., van der Ploeg L.H.T., Gibson W.C., Leegwater P.,  
RA Bijgenraam F., De Lange T., Weijers P., Calafat J., Borst P.;  
RT "Rapid change of the repertoire of variant surface glycoprotein genes in trypanosomas by gene duplication and deletion.";  
RL J. Mol. Biol. 190: 11-10 (1986).  
DR EMBL; X04041; CAA27674.1; -.  
FT NON\_TER 1  
SQ SEQUENCE 15 AA; 1658 MW; DA5AF6569E9A5788 CRC64;  
  
Query Match 53.8%; Score 21; DB 2; Length 15;  
Best Local Similarity 80.0%; Pred. No. 2.3e+03;  
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
  
QY 2 AFVTI 6  
Db 9 AFVTL 13  
  
RESULT 14  
Q47605 PRELIMINARY; PRT; 16 AA.  
AC Q47605; 1996 (TrEMBLrel. 01, Created)  
DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)  
DT 01-NOV-1998 (TrEMBLrel. 08, Last annotation update)  
DE C protein (Fragment).  
OS Escherichia coli.  
OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;  
OC Enterobacteriaceae; Escherichia.  
OX NCBI\_TaxID=562;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=91139577; PubMed=1995588;  
RA Tao T., Bourne J.C., Blumenthal R.M.;  
RT "A family of regulatory genes associated with type II restriction-modification systems";  
RL J. Bacteriol. 173: 1367-1375 (1991).  
DR EMBL; M63622; AAA24561.1; -.  
FT NON\_TER 1  
SQ SEQUENCE 16 AA; 1853 MW; E46774511496607C CRC64;  
  
Query Match 53.8%; Score 21; DB 2; Length 16;  
Best Local Similarity 80.0%; Pred. No. 2.5e+03;  
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 3 FVTIG 7  
Db 1  
  
Query Match 53.8%; Score 21; DB 2; Length 16;  
Best Local Similarity 80.0%; Pred. No. 2.5e+03;  
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Db      6 FTTIG 10

RESULT 15
Q6EML4
ID      Q6EML4      PRELIMINARY;      PRT;      17 AA.
AC      Q6EML4;
DT      25-OCT-2004 (TrEMBLrel. 28, Created)
DT      25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
DT      25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
DE      Aldolase B (Fragment).
OS      Meleagris gallopavo (Common turkey).
OC      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC      Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Meleagrids.
OX      NCBI_TaxID=9103;
RN      [1]
RP      SEQUENCE FROM N.A.
RX      PubMed=15140948; DOI=10.1093/molbev/msh157;
RA      Axelsson E., Smith N.G., Sundstrom H., Berlin S., Ellegren H.;
RT      "Male-biased mutation rate and divergence in autosomal, z-linked and
RT      w-linked introns of chicken and Turkey.";
RL      Mol. Biol. Evol. 21:1538-1547(2004).
DR      EMBL; AY139847; AAN75280.1; -.
FT      NON TER      1
FT      NON TER      17
FT      NON TER      17
SQ      SEQUENCE      17 AA; 1813 MW; E6CF8FF0BAFA8858 CRC64;

Query Match      53.8%; Score 21; DB 2; Length 17;
Best Local Similarity      66.7%; Pred. No. 2.6e+03;
Matches      4; Conservative      1; Mismatches      1; Indels      0; Gaps      0;

Qy      3 FVTIGK 8
Db      10 YVTSGK 15

RESULT 16
Q6EML5
ID      Q6EML5      PRELIMINARY;      PRT;      17 AA.
AC      Q6EML5;
DT      25-OCT-2004 (TrEMBLrel. 28, Created)
DT      25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
DT      25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
DE      Aldolase B (Fragment).
OS      Gallus gallus (Chicken).
OC      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC      Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC      Gallus.
OX      NCBI_TaxID=9031;
RN      [1]
RP      SEQUENCE FROM N.A.
RX      PubMed=15140948; DOI=10.1093/molbev/msh157;
RA      Axelsson E., Smith N.G., Sundstrom H., Berlin S., Ellegren H.;
RT      "Male-biased mutation rate and divergence in autosomal, z-linked and
RT      w-linked introns of chicken and Turkey.";
RL      Mol. Biol. Evol. 21:1538-1547(2004).
DR      EMBL; AY139841; AAN75280.1; -.
FT      NON TER      1
FT      NON TER      17
FT      NON TER      17
SQ      SEQUENCE      17 AA; 1813 MW; E6CF8FF0BAFA8858 CRC64;

Query Match      53.8%; Score 21; DB 2; Length 17;
Best Local Similarity      66.7%; Pred. No. 2.6e+03;
Matches      4; Conservative      1; Mismatches      1; Indels      0; Gaps      0;

Qy      3 FVTIGK 8
Db      10 YVTSGK 15

RESULT 17
Q6U2M9
ID      Q6U2M9      PRELIMINARY;      PRT;      23 AA.
AC      Q6U2M9;
DT      05-JUL-2004 (TrEMBLrel. 27, Created)
DT      05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT      05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE      Galactinol synthase (EC 2.4.1.123) (Fragment).
GN      Name=GAS1;
OS      Momordica charantia (Bitter melon) (Balsam pear).
OC      Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC      Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;
OC      eurosid1; Cucurbitales; Cucurbitaceae; Momordica.
OX      NCBI_TaxID=3673;
RN      [1]
RP      SEQUENCE FROM N.A.
RX      MEDLINE=22975109; PubMed=14526110; DOI=10.1104/pp.103.027714;
RA      Ayre B.G., Blair J.E., Turgeon R.;
RT      "Functional and phylogenetic analyses of a conserved regulatory
RT      program in the phloem of minor veins.";
RL      Plant Physiol. 133:1229-1239(2003).
DR      EMBL; AY379780; AAQ74882.1; -.
DR      GO; GO:0047216; F:inositol 3-alpha-galactosyltransferase acti. . .; IEA.
DR      GO; GO:0016757; F:transferase activity, transferring glycosyl. . .; IEA.
KW      Glycosyltransferase; Transferase.
FT      NON TER      23
FT      NON TER      23
FT      NON TER      23
SQ      SEQUENCE      23 AA; 2444 MW; 62411699CAB81657 CRC64;

Query Match      53.8%; Score 21; DB 2; Length 23;
Best Local Similarity      80.0%; Pred. No. 3.4e+03;
Matches      4; Conservative      1; Mismatches      0; Indels      0; Gaps      0;

Qy      1 RAYVT 5
Db      18 RAYVT 22

RESULT 18
Q6U2N2
ID      Q6U2N2      PRELIMINARY;      PRT;      24 AA.
AC      Q6U2N2;
DT      05-JUL-2004 (TrEMBLrel. 27, Created)
DT      05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT      05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE      Galactinol synthase (EC 2.4.1.123) (Fragment).
GN      Name=GAS1;
OS      Citrullus lanatus (Watermelon) (Citrullus vulgaris).
OC      Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC      Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;
OC      eurosid1; Cucurbitales; Cucurbitaceae; Citrullus.
OX      NCBI_TaxID=3654;
RN      [1]
RP      SEQUENCE FROM N.A.
RX      MEDLINE=22975109; PubMed=14526110; DOI=10.1104/pp.103.027714;
RA      Ayre B.G., Blair J.E., Turgeon R.;
RT      "Functional and phylogenetic analyses of a conserved regulatory
RT      program in the phloem of minor veins.";
RL      Plant Physiol. 133:1229-1239(2003).
DR      EMBL; AY379777; AAQ74879.1; -.
DR      GO; GO:0047216; F:inositol 3-alpha-galactosyltransferase acti. . .; IEA.
DR      GO; GO:0016757; F:transferase activity, transferring glycosyl. . .; IEA.
KW      Glycosyltransferase; Transferase.
FT      NON TER      24
FT      NON TER      24
FT      NON TER      24
SQ      SEQUENCE      24 AA; 2538 MW; E2BC0AE9D7930C06 CRC64;

Query Match      53.8%; Score 21; DB 2; Length 24;
Best Local Similarity      80.0%; Pred. No. 3.6e+03;
Matches      4; Conservative      1; Mismatches      0; Indels      0; Gaps      0;

Qy      1 RAYVT 5
Db      19 RAYVT 23

RESULT 19
Q9TVF1

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ID Q9TVF1 PRELIMINARY; PRT; 9 AA.
AC Q9TVF1;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
DE Mucin-like protein (Fragment).
GN Name=EMUCe-19c8;
OS Trypanosoma cruzi.
OC Eukaryota; Euklenozoa; Kinetoplastida; Trypanosomatidae; Trypanosoma.
OX NCBI_TaxID=5693;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Cl-Brenner;
RX MEDLINE=98225151; PubMed=9556557; DOI=10.1074/jbc.273.18.10843;
RA Di Noia J.M., D'Orso I., Aslund L., Sanchez D.O., Frasch A.C.;
RT "The Trypanosoma cruzi mucin family is transcribed from hundreds of
RL genes having hypervariable regions.";
RL J. Biol. Chem. 273.10843-10850(1998).
DR EMBL; AF036447; AAC14246.1; -.
FT NON TER 1
SQ SEQUENCE 9 AA; 896 MW; DBA831B1BB5DD72D CRC64;

Query Match 51.3%; Score 20; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.6e+06;
Matches 3; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 AFTVIG 7
Db 4 AYTTLG 9

RESULT 20
O87882 PRELIMINARY; PRT; 11 AA.
AC O87882;
DT 01-NOV-1998 (TrEMBLrel. 08, Created)
DT 01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DT 01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
DE Alkalyl hydroperoxide reductase (Fragment).
GN Name=ahpC;
OS Bacterium xenopi.
OC Bacteria; Actinobacteridia; Actinobacteridae; Actinomycetales;
OC Corynebacterineae; Mycobacteriaceae; Mycobacterium.
OX NCBI_TaxID=1789;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=ATCC19250;
RX MEDLINE=98406038; PubMed=9733688;
RA Pagan-Ramos E., Song J., McFalone M., Mudd M.H., Deretic V.;
RT "Oxidative stress response and characterization of the oxyR-ahpC and
RT furA-katG loci in Mycobacterium marinum.";
RL J. Bacteriol. 180:4856-4864(1998).
DR EMBL; U43810; AAC61663.1; -.
FT NON TER 11
SQ SEQUENCE 11 AA; 1147 MW; 45458CE1787041A7 CRC64;

Query Match 51.3%; Score 20; DB 2; Length 11;
Best Local Similarity 66.7%; Pred. No. 3e+03;
Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 AFTVIG 7
Db 2 ALLTIG 7

RESULT 21
Q86128 PRELIMINARY; PRT; 15 AA.
AC Q86128;
DT 01-NOV-1996 (TrEMBLrel. 01, Created)
DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE N protein (fragment).

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OS Vesicular stomatitis virus.
OC Viruses; ssRNA negative-strand viruses; Mononegavirales;
OC Rhabdoviridae; Vesiculovirus.
OX NCBI_TaxID=11276;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=80001959; PubMed=89911; DOI=10.1016/0092-8674(79)90274-5;
RA McGeoch D.J.;
RT "Structure of the gene N: gene NS intercistronic junction in the
RT genome of vesicular stomatitis virus.";
RL Cell 17:673-681(1979).
DR EMBL; V01210; CAA24521.1; -.
FT NON TER 1
SQ SEQUENCE 15 AA; 1800 MW; 16CA68A659416B51 CRC64;

Query Match 51.3%; Score 20; DB 2; Length 15;
Best Local Similarity 100.0%; Pred. No. 3.9e+03;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 TIGK 8
Db 4 TIGK 7

RESULT 22
Q91SF3 PRELIMINARY; PRT; 19 AA.
ID Q91SF3;
AC Q91SF3;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE Orf3 (Fragment).
OS Feline calicivirus.
OC Viruses; ssRNA positive-strand viruses, no DNA stage; Caliciviridae;
OC Vesivirus.
OX NCBI_TaxID=11978;
RN [1]
RP SEQUENCE FROM N.A.
RA Rice C.C., Kruger J.M., Vilnis A., Venta P.J., Maes R.K.;
RL Submitted (MAR-2001) to the EMBL/GenBank/DBSJ databases.
DR EMBL; AF357012; AAK43706.1; -.
FT NON TER 19
SQ SEQUENCE 19 AA; 1989 MW; D599B127336A6177 CRC64;

Query Match 51.3%; Score 20; DB 2; Length 19;
Best Local Similarity 100.0%; Pred. No. 4.9e+03;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 TIGK 8
Db 14 TIGK 17

RESULT 23
Q91SF5 PRELIMINARY; PRT; 19 AA.
ID Q91SF5;
AC Q91SF5;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE Orf3 (Fragment).
OS Feline calicivirus.
OC Viruses; ssRNA positive-strand viruses, no DNA stage; Caliciviridae;
OC Vesivirus.
OX NCBI_TaxID=11978;
RN [1]
RP SEQUENCE FROM N.A.
RA Rice C.C., Kruger J.M., Vilnis A., Venta P.J., Maes R.K.;
RL Submitted (MAR-2001) to the EMBL/GenBank/DBSJ databases.
DR EMBL; AF357011; AAK43704.1; -.
FT NON TER 19
SQ SEQUENCE 19 AA; 1989 MW; D599B127336A6177 CRC64;

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Query Match      51.3%; Score 20; DB 2; Length 19;
Best Local Similarity 100.0%; Pred. No. 4.9e+03;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 TIGK 8
DB 14 TIGK 17

RESULT 24
Q91SF7 PRELIMINARY; PRT; 19 AA.
AC Q91SF7;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DE 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE Oxf3 (Fragment).
OS Peline calicivirus.
OC Viruses; ssRNA positive-strand viruses, no DNA stage; Caliciviridae;
OC Vesivirus.
OX NCBI_TaxID=11978;
RN [1]
RP SEQUENCE FROM N.A.
RA Rice C.C., Kruger J.M., Vilnius A., Venta P.J., Maes R.K.;
RL Submitted (MAR-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF357010; AAK43702.1; -.
FT NON TER 19
SQ SEQUENCE 19 AA; 1989 MW; D599B127336A6177 CRC64;

Query Match      51.3%; Score 20; DB 2; Length 19;
Best Local Similarity 100.0%; Pred. No. 4.9e+03;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 TIGK 8
DB 14 TIGK 17

RESULT 25
Q9TWP7 PRELIMINARY; PRT; 20 AA.
AC Q9TWP7;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
DE Cathepsin B-like cysteine protease (Fragment).
OS Leishmania mexicana.
OC Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae; Leishmania.
OX NCBI_TaxID=5665;
RN [1]
RP SEQUENCE.
RX MEDLINE=94187801; PubMed=8139620; DOI=10.1016/0166-6851(93)90116-P;
RA Robertson C.D., Coombs G.H.;
RT "Cathepsin B-like cysteine proteases of Leishmania mexicana.";
RL Mol. Biochem. Parasitol. 62:271-279(1993).
SQ SEQUENCE 20 AA; 2203 MW; FE1A260FA1DB841F CRC64;

Query Match      51.3%; Score 20; DB 2; Length 20;
Best Local Similarity 80.0%; Pred. No. 5.1e+03;
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 4 VTIGK 8
DB 16 VTIGK 20

RESULT 26
Q09166 PRELIMINARY; PRT; 21 AA.
AC Q09166;
DT 01-NOV-1996 (TrEMBLrel. 01, Created)
DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)

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DE Neutral metalloprotease (EC 3.4.24.31) (Fragment).
GN Nameshpi;
OS Staphylococcus carnosus.
OC Bacteria; Firmicutes; Bacillales; Staphylococcus.
OX NCBI_TaxID=1281;
RN [1]
RP SEQUENCE.
RC STRAIN=TW300;
RX MEDLINE=94166751; PubMed=8121397;
RA Ayora S., Goetz F.;
RT "Genetic and biochemical properties of an extracellular neutral
metallopeptidase from Staphylococcus hyicus subsp. hyicus.";
RL Mol. Genet. 242:421-430(1994).
CC -1- CATALYTIC ACTIVITY: PREFERENTIAL CLEAVAGE OF BONDS WITH
HYDROPHOBIC RESIDUES IN P1'.
CC -1- COFACTOR: BINDS A ZINC ATOM.
CC -1- SUBCELLULAR LOCATION: SECRETED.
DR GO; GO:0016787; P:hydrolase activity; IEA.
DR GO; GO:0008237; F:metallopeptidase activity; IEA.
KW Hydrolase; Metal-binding; Metalloprotease; Zinc; Zymogen.
FT NON TER 21
SQ SEQUENCE 21 AA; 2328 MW; A7C361A536FEC614 CRC64;

Query Match      51.3%; Score 20; DB 2; Length 21;
Best Local Similarity 50.0%; Pred. No. 5.3e+03;
Matches 3; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFVTI 6
DB 14 RSFTTV 19

RESULT 27
Q8QYS4 PRELIMINARY; PRT; 21 AA.
AC Q8QYS4;
DT 01-JUN-2002 (TrEMBLrel. 21, Created)
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Agnoprotein (Fragment).
OS Polyomavirus BK (BKV).
OC Viruses; dsDNA viruses, no RNA stage; Polyomaviridae; Polyomavirus.
OX NCBI_TaxID=10629;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22379369; PubMed=12490781;
RA Li R.M., Mannon R.B., Kleiner D., Tsokos M., Bynum M., Kirk A.D.,
RA Kopp J.B.;
RT "BK virus and SV40 co-infection in polyomavirus nephropathy.";
RL Transplantation 74:1497-1504(2002).
DR EMBL; AF442900; AAL78924.1; -.
DR GO; GO:0003677; F:DNA binding; IEA.
DR InterPro; IPR002643; Polyoma_agn.
DR Pfam; PF01736; Polyoma_agn.1.
DR ProDom; PD004470; Polyoma_agn.1.
FT NON TER 21
SQ SEQUENCE 21 AA; 2347 MW; E7D57BD9AE20D4E3 CRC64;

Query Match      51.3%; Score 20; DB 2; Length 21;
Best Local Similarity 50.0%; Pred. No. 5.3e+03;
Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8
DB 9 QASVKVGK 16

RESULT 28
Q8QYS5 PRELIMINARY; PRT; 21 AA.
AC Q8QYS5;
DT 01-JUN-2002 (TrEMBLrel. 21, Created)
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)

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OC Viruses: dsDNA viruses, no RNA stage; Polyomaviridae; Polyomavirus.  
OX NCBI\_TaxID=10629;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=22379369; PubMed=12490781;  
RA Li R.M., Mannon R.B., Kleiner D., Tsokos M., Bynum M., Kirk A.D.,  
RA Kopp J.B.;  
RT "BK virus and SV40 co-infection in polyomavirus nephropathy.";  
RL Transplantation 74:1497-1504(2002).  
RN [2]  
RP SEQUENCE FROM N.A.  
RA Li R.-M., Kopp J.B.;  
RL Submitted (NOV-2001) to the EMBL/GenBank/DBJ databases.  
DR EMBL; AF442897; AAL78923.1; -  
DR GO; GO:0003677; F:DNA binding; IEA.  
DR InterPro; IPR002643; Polyoma\_agn.  
DR Pfam; PF01736; Polyoma\_agn; 1.  
DR ProDom; PD004470; Polyoma\_agn; 1.  
FT NON\_TER 21 21  
SQ SEQUENCE 21 AA; 2347 MW; E7D57BD9AE20D4E3 CRC64;  
  
Query Match 51.3%; Score 20; DB 2; Length 21;  
Best Local Similarity 50.0%; Pred. No. 5.3e+03;  
Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1 RAFVTIGK 8  
Db :|||:  
9 QASVKVGK 16  
  
RESULT 29  
Q8QYS6 PRELIMINARY; PRT; 21 AA.  
ID Q8QYS6  
AC Q8QYS6;  
DT 01-JUN-2002 (TrEMBLrel. 21, Created)  
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)  
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)  
DE Agnoprotein (Fragment).  
OS Polyomavirus BK (BKV).  
OC Viruses: dsDNA viruses, no RNA stage; Polyomaviridae; Polyomavirus.  
OX NCBI\_TaxID=10629;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=22379369; PubMed=12490781;  
RA Li R.M., Mannon R.B., Kleiner D., Tsokos M., Bynum M., Kirk A.D.,  
RA Kopp J.B.;  
RT "BK virus and SV40 co-infection in polyomavirus nephropathy.";  
RL Transplantation 74:1497-1504(2002).  
DR EMBL; AF442897; AAL78923.1; -  
DR GO; GO:0003677; F:DNA binding; IEA.  
DR InterPro; IPR002643; Polyoma\_agn.  
DR Pfam; PF01736; Polyoma\_agn; 1.  
DR ProDom; PD004470; Polyoma\_agn; 1.  
FT NON\_TER 21 21  
SQ SEQUENCE 21 AA; 2347 MW; E5B8EBD9AE20D4E3 CRC64;  
  
Query Match 51.3%; Score 20; DB 2; Length 21;  
Best Local Similarity 50.0%; Pred. No. 5.3e+03;  
Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1 RAFVTIGK 8  
Db :|||:  
9 QASVKVGK 16  
  
RESULT 30  
Q8QYS8 PRELIMINARY; PRT; 21 AA.  
ID Q8QYS8  
AC Q8QYS8;  
DT 01-JUN-2002 (TrEMBLrel. 21, Created)  
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)  
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)  
DE Agnoprotein (Fragment).  
OS Polyomavirus BK (BKV).  
OC Viruses: dsDNA viruses, no RNA stage; Polyomaviridae; Polyomavirus.  
OX NCBI\_TaxID=10629;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=22379369; PubMed=12490781;  
RA Li R.M., Mannon R.B., Kleiner D., Tsokos M., Bynum M., Kirk A.D.,  
RA Kopp J.B.;  
RT "BK virus and SV40 co-infection in polyomavirus nephropathy.";  
RL Transplantation 74:1497-1504(2002).  
DR EMBL; AF442896; AAL78922.1; -  
DR GO; GO:0003677; F:DNA binding; IEA.  
DR InterPro; IPR002643; Polyoma\_agn.  
DR Pfam; PF01736; Polyoma\_agn; 1.  
DR ProDom; PD004470; Polyoma\_agn; 1.  
FT NON\_TER 21 21  
SQ SEQUENCE 21 AA; 2347 MW; E7D57BD9AE20D4E3 CRC64;  
  
Query Match 51.3%; Score 20; DB 2; Length 21;  
Best Local Similarity 50.0%; Pred. No. 5.3e+03;  
Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1 RAFVTIGK 8  
Db :|||:  
9 QASVKVGK 16  
  
RESULT 31  
Q7SOM0 PRELIMINARY; PRT; 22 AA.  
ID Q7SOM0  
AC Q7SOM0;  
DT 01-MAR-2004 (TrEMBLrel. 26, Created)  
DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)  
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)  
DE Predicted protein.  
GN Name=NCU09457.1;  
OS Neurospora crassa.  
OC Eukaryota; Fungi; Ascomycota; Pezizomycotina; Sordariomycetes;  
OC Sordariomycetidae; Sordariales; Sordariaceae; Neurospora.  
OX NCBI\_TaxID=5141;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC STRAIN=OR74A;  
RA Galagan J.E., Calvo S.E., Borkovich K.A., Selker E.U., Read N.D.,  
RA Jaffe D., Fitzhugh W., Ma L.-J., Smirnov S., Purcell S., Rehman B.,  
RA Elkins T., Engels R., Wang S., Nielsen C.B., Butler J., Endrizzi M.,  
RA Qui D., Ianakiev P., Pedersen D., Nelson M., Washburne M.,  
RA Selitrennikoff C.P., Kinsey J.A., Braun E.L., Zelter A., Schulte U.,  
RA Kothe G.O., Jedd G., Mewes W., Staben C., Marcotte E., Greenberg D.,  
RA Roy A., Foley K., Naylor J., Thomann N., Barrett R., Gherre S.,  
RA Kamal M., Kamvassellis M., Mauceli E., Bielek C., Rudd S., Frishman D.,  
RA Krystofova S., Rasmussen C., Metznerberg R.L., Perkins D.D., Kroken S.,  
RA Cogoni C., Macino G., Catcheside D., Li W., Pratt R.J., Osman S.A.,  
RA DeSouza C.C., Glass L., Orbach M.J., Berglund J., Voelker R.,  
RA Yarden O., Plamann M., Seiler S., Dunlap J., Radford A., Aramayo R.,  
RA Natvig D.O., Alex L.A., Mannhaupt G., Ebbole D.J., Freitag M.,  
RA Paulsen I., Sachs M.S., Lander E.S., Nussbaum C., Birren B.;  
RT "The Genome Sequence of the Filamentous Fungus Neurospora crassa.";  
RL Nature 0:0-0(2003).  
CC -!- CAUTION: The sequence shown here is derived from an  
CC EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is  
CC preliminary data.  
DR EMBL; AABX01000490; EAA28866.1; -  
SQ SEQUENCE 22 AA; 2584 MW; 59824A08F3774EAC CRC64;  
  
Query Match 51.3%; Score 20; DB 2; Length 22;  
Best Local Similarity 57.1%; Pred. No. 5.6e+03;  
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2 AFVTIGK 8

DE Agnoprotein (Fragment).  
OS Polyomavirus BK (BKV).  
OC Viruses: dsDNA viruses, no RNA stage; Polyomaviridae; Polyomavirus.  
OX NCBI\_TaxID=10629;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=22379369; PubMed=12490781;  
RA Li R.M., Mannon R.B., Kleiner D., Tsokos M., Bynum M., Kirk A.D.,  
RA Kopp J.B.;  
RT "BK virus and SV40 co-infection in polyomavirus nephropathy.";  
RL Transplantation 74:1497-1504(2002).  
DR EMBL; AF442897; AAL78923.1; -  
DR GO; GO:0003677; F:DNA binding; IEA.  
DR InterPro; IPR002643; Polyoma\_agn.  
DR Pfam; PF01736; Polyoma\_agn; 1.  
DR ProDom; PD004470; Polyoma\_agn; 1.  
FT NON\_TER 21 21  
SQ SEQUENCE 21 AA; 2375 MW; E5B8EBD9AE20D4E3 CRC64;  
  
Query Match 51.3%; Score 20; DB 2; Length 21;  
Best Local Similarity 50.0%; Pred. No. 5.3e+03;  
Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1 RAFVTIGK 8  
Db :|||:  
9 QASVKVGK 16  
  
RESULT 29  
Q8QYS6 PRELIMINARY; PRT; 21 AA.  
ID Q8QYS6  
AC Q8QYS6;  
DT 01-JUN-2002 (TrEMBLrel. 21, Created)  
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)  
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)  
DE Agnoprotein (Fragment).  
OS Polyomavirus BK (BKV).  
OC Viruses: dsDNA viruses, no RNA stage; Polyomaviridae; Polyomavirus.  
OX NCBI\_TaxID=10629;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=22379369; PubMed=12490781;  
RA Li R.M., Mannon R.B., Kleiner D., Tsokos M., Bynum M., Kirk A.D.,  
RA Kopp J.B.;  
RT "BK virus and SV40 co-infection in polyomavirus nephropathy.";  
RL Transplantation 74:1497-1504(2002).  
DR EMBL; AF442896; AAL78922.1; -  
DR GO; GO:0003677; F:DNA binding; IEA.  
DR InterPro; IPR002643; Polyoma\_agn.  
DR Pfam; PF01736; Polyoma\_agn; 1.  
DR ProDom; PD004470; Polyoma\_agn; 1.  
FT NON\_TER 21 21  
SQ SEQUENCE 21 AA; 2347 MW; E7D57BD9AE20D4E3 CRC64;  
  
Query Match 51.3%; Score 20; DB 2; Length 21;  
Best Local Similarity 50.0%; Pred. No. 5.3e+03;  
Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1 RAFVTIGK 8  
Db :|||:  
9 QASVKVGK 16  
  
RESULT 30  
Q8QYS8 PRELIMINARY; PRT; 21 AA.  
ID Q8QYS8  
AC Q8QYS8;  
DT 01-JUN-2002 (TrEMBLrel. 21, Created)  
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)  
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)  
DE Agnoprotein (Fragment).  
OS Polyomavirus BK (BKV).  
OC Viruses: dsDNA viruses, no RNA stage; Polyomaviridae; Polyomavirus.  
OX NCBI\_TaxID=10629;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=22379369; PubMed=12490781;  
RA Li R.M., Mannon R.B., Kleiner D., Tsokos M., Bynum M., Kirk A.D.,  
RA Kopp J.B.;  
RT "BK virus and SV40 co-infection in polyomavirus nephropathy.";  
RL Transplantation 74:1497-1504(2002).  
DR EMBL; AF442896; AAL78922.1; -  
DR GO; GO:0003677; F:DNA binding; IEA.  
DR InterPro; IPR002643; Polyoma\_agn.  
DR Pfam; PF01736; Polyoma\_agn; 1.  
DR ProDom; PD004470; Polyoma\_agn; 1.  
FT NON\_TER 21 21  
SQ SEQUENCE 21 AA; 2347 MW; E7D57BD9AE20D4E3 CRC64;  
  
Query Match 51.3%; Score 20; DB 2; Length 21;  
Best Local Similarity 50.0%; Pred. No. 5.3e+03;  
Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1 RAFVTIGK 8  
Db :|||:  
9 QASVKVGK 16  
  
RESULT 31  
Q7SOM0 PRELIMINARY; PRT; 22 AA.  
ID Q7SOM0  
AC Q7SOM0;  
DT 01-MAR-2004 (TrEMBLrel. 26, Created)  
DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)  
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)  
DE Predicted protein.  
GN Name=NCU09457.1;  
OS Neurospora crassa.  
OC Eukaryota; Fungi; Ascomycota; Pezizomycotina; Sordariomycetes;  
OC Sordariomycetidae; Sordariales; Sordariaceae; Neurospora.  
OX NCBI\_TaxID=5141;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC STRAIN=OR74A;  
RA Galagan J.E., Calvo S.E., Borkovich K.A., Selker E.U., Read N.D.,  
RA Jaffe D., Fitzhugh W., Ma L.-J., Smirnov S., Purcell S., Rehman B.,  
RA Elkins T., Engels R., Wang S., Nielsen C.B., Butler J., Endrizzi M.,  
RA Qui D., Ianakiev P., Pedersen D., Nelson M., Washburne M.,  
RA Selitrennikoff C.P., Kinsey J.A., Braun E.L., Zelter A., Schulte U.,  
RA Kothe G.O., Jedd G., Mewes W., Staben C., Marcotte E., Greenberg D.,  
RA Roy A., Foley K., Naylor J., Thomann N., Barrett R., Gherre S.,  
RA Kamal M., Kamvassellis M., Mauceli E., Bielek C., Rudd S., Frishman D.,  
RA Krystofova S., Rasmussen C., Metznerberg R.L., Perkins D.D., Kroken S.,  
RA Cogoni C., Macino G., Catcheside D., Li W., Pratt R.J., Osman S.A.,  
RA DeSouza C.C., Glass L., Orbach M.J., Berglund J., Voelker R.,  
RA Yarden O., Plamann M., Seiler S., Dunlap J., Radford A., Aramayo R.,  
RA Natvig D.O., Alex L.A., Mannhaupt G., Ebbole D.J., Freitag M.,  
RA Paulsen I., Sachs M.S., Lander E.S., Nussbaum C., Birren B.;  
RT "The Genome Sequence of the Filamentous Fungus Neurospora crassa.";  
RL Nature 0:0-0(2003).  
CC -!- CAUTION: The sequence shown here is derived from an  
CC EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is  
CC preliminary data.  
DR EMBL; AABX01000490; EAA28866.1; -  
SQ SEQUENCE 22 AA; 2584 MW; 59824A08F3774EAC CRC64;  
  
Query Match 51.3%; Score 20; DB 2; Length 22;  
Best Local Similarity 57.1%; Pred. No. 5.6e+03;  
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2 AFVTIGK 8

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Db      || :||
        6 AFPLLGK 12

RESULT 32
Q945F1  PRELIMINARY;      PRT;      24 AA.
AC Q945F1 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Hydroxymethyl transferase (Fragment).
OS Cicer arietinum (Chickpea) (Garbanzo).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;
OC eurosids I; Fabales; Fabaceae; Papilionoideae; Cicereae; Cicer.
OX NCBI_TaxID=3827;
RN [1]
RP SEQUENCE FROM N.A.
RA Rajesh P.N., Gupta V.S., Ranjekar P.K., Muehlbauer F.J.;
RL Submitted (SEP-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF416481; AAL08018.1; -.
DR GO; GO:0016740; F:transferase activity; IEA.
KW Transferase.
FT NON_TER 1 1
SQ SEQUENCE 24 AA; 2801 MW; 38D6B795617598CD CRC64;

Query Match 51.3%; Score 20; DB 2; Length 24;
Best Local Similarity 57.1%; Pred. No. 6e+03;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 RAFVTIG 7
: ||||
Db 8 KQFPTIG 14

RESULT 33
Q9QW22  PRELIMINARY;      PRT;      24 AA.
AC Q9QW22 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE NMDA receptor subunit NR2A (Fragment).
OS Rattus sp.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10118;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=93279380; PubMed=8099331; DOI=10.1016/0014-5793(93)81533-6;
RA Raditsch M., Ruppertsberg J.P., Kuner T., Gunther W., Schoepfer R.,
RA Seeburg P.H., Jahn W., Witzemann V.;
RT "Subunit-specific block of cloned NMDA receptors by argitoxin636.";
RL FEBS Lett. 324:63-66(1993).
SQ SEQUENCE 24 AA; 2718 MW; 36529F951FA012C7 CRC64;

Query Match 51.3%; Score 20; DB 2; Length 24;
Best Local Similarity 100.0%; Pred. No. 6e+03;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 TICK 8
: ||||
Db 3 TICK 6

RESULT 34
Q9QW23  PRELIMINARY;      PRT;      24 AA.
AC Q9QW23 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)

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DE NMDA receptor subunit NR2C (Fragment).
OS Rattus sp.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10118;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=93279380; PubMed=8099331; DOI=10.1016/0014-5793(93)81533-6;
RA Raditsch M., Ruppertsberg J.P., Kuner T., Gunther W., Schoepfer R.,
RA Seeburg P.H., Jahn W., Witzemann V.;
RT "Subunit-specific block of cloned NMDA receptors by argitoxin636.";
RL FEBS Lett. 324:63-66(1993).
SQ SEQUENCE 24 AA; 2749 MW; 203D9CE281A012C7 CRC64;

Query Match 51.3%; Score 20; DB 2; Length 24;
Best Local Similarity 100.0%; Pred. No. 6e+03;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 TICK 8
: ||||
Db 3 TICK 6

RESULT 35
Q7M1V8  PRELIMINARY;      PRT;      10 AA.
AC Q7M1V8 01-MAR-2004 (TrEMBLrel. 26, Created)
DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE Protein P7 (Fragment)..
OS Nicotiana glauca (Leadwort-leaved tobacco).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; asterids;
OC Lamiales; Solanales; Solanaceae; Nicotiana.
OX NCBI_TaxID=4092;
RN [1]
RP SEQUENCE.
RA Bauw G., De Loose M., Inze D., Van Montagu M., Vandekerckhove J.;
RT "Alterations in the phenotype of plant cells studied by NH2-terminal
RT amino acid-sequence analysis of proteins electrophoretically separated from two-
RT dimensional gel-separated total extracts.";
RL Proc. Natl. Acad. Sci. U.S.A. 84:4806-4810(1987).
DR PIR; D28027; D28027.
FT NON_TER 1 1
FT NON_TER 10 10
SQ SEQUENCE 10 AA; 1016 MW; 2697C972C9D5A408 CRC64;

Query Match 48.7%; Score 19; DB 2; Length 10;
Best Local Similarity 66.7%; Pred. No. 4.6e+03;
Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFVTI 6
: ||||
Db 4 RSFVPI 9

RESULT 36
Q9BR06  PRELIMINARY;      PRT;      12 AA.
AC Q9BR06 01-JUN-2001 (TrEMBLrel. 17, Created)
DT 01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
DT 01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
DE DJ343K2.3 (Novel protein) (Fragment).
GN Name=dJ621N11.4;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Laird G.;

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RL Submitted (MAR-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AL031659; CAC34516.1; -.
FT NON TER 12
SQ SEQUENCE 12 AA; 1422 MW; DC7FBF1578B2C9D2 CRC64;

Query Match 48.7%; Score 19; DB 2; Length 12;
Best Local Similarity 100.0%; Pred. No. 5.4e+03;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 FVTIG 6
Db |||
6 FVTI 9

RESULT 37
Q7S9F5 PRELIMINARY; PRT; 14 AA.
ID Q7S9F5
AC Q7S9F5; 2004 (TREMBlrel. 26, Created)
DT 01-MAR-2004 (TREMBlrel. 26, Last sequence update)
DT 01-MAR-2004 (TREMBlrel. 26, Last annotation update)
DE Predicted protein.
GN Name=NCU06392.1;
OS Neurospora crassa.
OC Eukaryota; Fungi; Ascomycota; Pezizomycotina; Sordariomycetes;
OC Sordariomycetidae; Sordariales; Sordariaceae; Neurospora.
OX NCBI_TaxID=5141;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=OR74A;
RA Galagan J.E., Calvo S.E., Borkovich K.A., Selker E.U., Read N.D.,
RA Jaffe D., FitzHugh W., Ma L.-J., Smirnov S., Purcell S., Rehm B.,
RA Elkins T., Engels R., Wang S., Nielsen C.B., Butler J., Endrizzi M.,
RA Qui D., Tanakiev P., Pedersen D., Nelson M., Washburne M.,
RA Selitrennikoff C.P., Kinsey J.A., Braun E.L., Zelter A., Schulte U.,
RA Kothe G.O., Jedd G., Mewes W., Thomann N., Barrett R., Greenberg D.,
RA Roy A., Foley K., Naylor J., Stambrook P., Rudd S., Frishman D.,
RA Kanal M., Kamyselis M., Mauceli E., Bielek C., Perkins D.D., Kroken S.,
RA Krystofova S., Rasmussen C., Metznerberg R.L., Perkins D.D., Kroken S.,
RA Cogoni C., Macino G., Catchside D., Li W., Pratt R.J., Osman S.A.,
RA DeSouza C.C., Glass L., Orbach M.J., Berglund J., Voelker R.,
RA Varden O., Plamann M., Seiler S., Dunlap J., Radford A., Aramayo R.,
RA Natvig D.O., Alex L.A., Mannhaupt G., Ebbole D.J., Freitag M.,
RA Paulsen I., Sachs M.S., Lander E.S., Nusbaum C., Birren B.;
RT "The Genome Sequence of the Filamentous Fungus Neurospora crassa.";
RL Nature 0:0-0(2003).....
CC -!- CAUTION: The sequence shown here is derived from an
CC EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is
CC preliminary data.
DR EMBL; AABX01000214; EAA32994.1; -.
SQ SEQUENCE 14 AA; 1673 MW; 6865AEELF564FBD4 CRC64;

Query Match 48.7%; Score 19; DB 2; Length 14;
Best Local Similarity 50.0%; Pred. No. 6.3e+03;
Matches 4; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8
Db |||
5 RRVAVGK 12

RESULT 38
Q9UCJ7 PRELIMINARY; PRT; 16 AA.
ID Q9UCJ7
AC Q9UCJ7; 2000 (TREMBlrel. 13, Created)
DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)
DT 01-MAY-2000 (TREMBlrel. 13, Last annotation update)
DE Tartrate-resistant acid phosphatase PEAK 2 isoform 23 kDa subunit
DE (fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

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OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE.
RX MEDLINE=93121546; PubMed=1477968;
RA Jankila A.J., Latham M.D., Lam K.W., Chow K.C., Li C.Y., Yam L.T.;
RT "Heterogeneity of hairy cell tartrate-resistant acid phosphatase.";
RL Clin. Biochem. 25:437-443(1992).
SQ SEQUENCE 16 AA; 1616 MW; C260E1A756B83299 CRC64;

Query Match 48.7%; Score 19; DB 2; Length 16;
Best Local Similarity 60.0%; Pred. No. 7.1e+03;
Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 3 FVTIG 7
Db |||
7 FVAVG 11

RESULT 39
Q7Y4G6 PRELIMINARY; PRT; 18 AA.
ID Q7Y4G6
AC Q7Y4G6; 2003 (TREMBlrel. 25, Created)
DT 01-OCT-2003 (TREMBlrel. 25, Last sequence update)
DT 01-OCT-2003 (TREMBlrel. 25, Last annotation update)
DE E3.
OS Lactococcus bacteriophage 5440.
OC Viruses; dsDNA viruses, no RNA stage; Caudovirales; Siphoviridae;
OC c2-like viruses.
OX NCBI_TaxID=206062;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22837671; PubMed=12957892;
RX DOI=10.1128/AEM.69.9.5104-5114.2003;
RA Rakonjac J., Ward L.J., Schiemann A.H., Gardner P.P., Lubbers M.W.,
RA O'Toole P.W.;
RT "Sequence diversity and functional conservation of the origin of
RT replication in lactococcal prophage phages.";
RL Appl. Environ. Microbiol. 69:5104-5114(2003).
DR EMBL; AY129506; AAN05708.1; -.
SQ SEQUENCE 18 AA; 2061 MW; 40DE6E393961EC06 CRC64;

Query Match 48.7%; Score 19; DB 2; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.9e+03;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 FVTI 6
Db |||
7 FVTI 10

RESULT 40
Q9PWQ4 PRELIMINARY; PRT; 20 AA.
ID Q9PWQ4
AC Q9PWQ4; 2000 (TREMBlrel. 13, Created)
DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)
DT 01-MAY-2000 (TREMBlrel. 13, Last annotation update)
DE Prolactin (fragment).
GN Name=prl;
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=20078374; PubMed=10612250;
RX Miao Y., Burt D.W., Paton I.R., Sharp P.J., Dunn I.C.;
RT "Mapping of the prolactin gene to chicken chromosome 2.";
RL Anim. Genet. 30:473-473(1999).
DR EMBL; AJ239131; CAB43530.1; -.
HSSP; P01236; 1N9D.

```

FT NON\_TER 1 1  
FT NON\_TER 20 20  
SQ. SEQUENCE 20 AA; 2223 MW; 258CCCAA95F12D6 CRC64;

Query Match 48.7%; Score 19; DB 2; Length 20;  
Best Local Similarity 60.0%; Pred. No. 8.6e+03;  
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 5  
Db 8 RGFIT 12

RESULT 41  
Q8HS54  
ID Q8HS54 PRELIMINARY; PRT; 21 AA.  
AC Q8HS54  
DT 01-MAR-2003 (TrEMBLrel. 23, Created)  
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)  
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)  
DE PdbH (Fragment).  
GN Name=psbh;  
OS Arabidopsis thaliana (Mouse-ear cress).  
OG Chloroplast.  
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;  
OC eurosids II; Brassicales; Brassicaceae; Arabidopsi.  
OX NCBI\_TaxID=3702;  
RN [1]  
RP SEQUENCE FROM N.A.  
RA Graham S.W., Reeves P.A., Burns A., Olmstead R.G.;  
RL Submitted (FEB-2000) to the EMBL/GenBank/DBJ databases.  
DR EMBL; AY007458; AAG12346.1; -.  
DR GO; GO:0009507; C:chloroplast; IEA.  
KW Chloroplast.  
FT NON\_TER 21 21  
SQ SEQUENCE 21 AA; 2195 MW; 88A9E60C91FF9544 CRC64;

Query Match 48.7%; Score 19; DB 2; Length 21;  
Best Local Similarity 75.0%; Pred. No. 9e+03;  
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 5 TIGK 8  
Db 18 TVGK 21

RESULT 42  
Q8QYS3  
ID Q8QYS3 PRELIMINARY; PRT; 21 AA.  
AC Q8QYS3  
DT 01-JUN-2002 (TrEMBLrel. 21, Created)  
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)  
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)  
DE Agnoprotein (Fragment).  
OS Polyomavirus BK (BKV).  
OC Viruses; dsDNA viruses, no RNA stage; Polyomaviridae; Polyomavirus.  
OX NCBI\_TaxID=10629;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=22379369; PubMed=12490781;  
RA Li R.M., Mannon R.B., Kleiner D., Tsokos M., Bynum M., Kirk A.D.,  
RA Kopp J.B.;  
RT "BK virus and SV40 co-infection in polyomavirus nephropathy.";  
RL Transplantation 74:1497-1504(2002).  
DR EMBL; AF442903; AAL78925.1; -.  
DR GO; GO:0003677; F:DNA binding; IEA.  
DR InterPro; IPR002643; Polyoma\_agn.  
DR Pfam; PF01736; Polyoma\_agn; 1.  
DR ProDom; PD004470; Polyoma\_agn; 1.  
FT NON\_TER 21 21  
SQ SEQUENCE 21 AA; 2361 MW; 65D57BD9AE20D4F6 CRC64;

Query Match 48.7%; Score 19; DB 2; Length 21;  
Best Local Similarity 50.0%; Pred. No. 9e+03;  
Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
Db 9 QASVKLGK 16

RESULT 43  
Q8QYS7  
ID Q8QYS7 PRELIMINARY; PRT; 21 AA.  
AC Q8QYS7  
DT 01-JUN-2002 (TrEMBLrel. 21, Created)  
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)  
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)  
DE Agnoprotein (Fragment).  
OS Polyomavirus BK (BKV).  
OC Viruses; dsDNA viruses, no RNA stage; Polyomaviridae; Polyomavirus.  
OX NCBI\_TaxID=10629;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=22379369; PubMed=12490781;  
RA Li R.M., Mannon R.B., Kleiner D., Tsokos M., Bynum M., Kirk A.D.,  
RA Kopp J.B.;  
RT "BK virus and SV40 co-infection in polyomavirus nephropathy.";  
RL Transplantation 74:1497-1504(2002).  
DR EMBL; AF442893; AAL78919.1; -.  
DR GO; GO:0003677; F:DNA binding; IEA.  
DR InterPro; IPR002643; Polyoma\_agn.

Query Match 48.7%; Score 19; DB 2; Length 21;  
Best Local Similarity 50.0%; Pred. No. 9e+03;  
Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
Db 9 QASVKLGK 16

RESULT 44  
Q8QYS9  
ID Q8QYS9 PRELIMINARY; PRT; 21 AA.  
AC Q8QYS9  
DT 01-JUN-2002 (TrEMBLrel. 21, Created)  
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)  
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)  
DE Agnoprotein (Fragment).  
OS Polyomavirus BK (BKV).  
OC Viruses; dsDNA viruses, no RNA stage; Polyomaviridae; Polyomavirus.  
OX NCBI\_TaxID=10629;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=22379369; PubMed=12490781;  
RA Li R.M., Mannon R.B., Kleiner D., Tsokos M., Bynum M., Kirk A.D.,  
RA Kopp J.B.;  
RT "BK virus and SV40 co-infection in polyomavirus nephropathy.";  
RL Transplantation 74:1497-1504(2002).  
DR EMBL; AF442893; AAL78919.1; -.  
DR GO; GO:0003677; F:DNA binding; IEA.  
DR InterPro; IPR002643; Polyoma\_agn.

Mon May 16. 12:45:01 2005

DR Pfam; PF01736; Polyoma\_agn0; 1.  
DR ProDom; PD004470; Polyoma\_agn0; 1.  
FT NON TER 21  
SQ SEQUENCE 21 AA; 2361 MW; 65D57BD9AE20D4F6 CRC64;  
Query Match 48.7%; Score 19; DB 2; Length 21;  
Best Local Similarity 50.0%; Pred. No. 9e+03; 2; Indels 0; Gaps 0;  
Matches 4; Conservative 2; Mismatches 0; Gaps 0;  
QY 1 RAFVTIGK 8  
Db 9 QASVKLGK 16

RESULT 45  
Q8QYTO PRELIMINARY; PRT; 21 AA.  
AC Q8QYTO 2002 (TREMBLrel. 21, Created)  
DT 01-JUN-2002 (TREMBLrel. 21, Last sequence update)  
DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)  
DE Agnoprotein (Fragment).  
OS Polyomavirus BK (BKV).  
OC Viruses; dsDNA viruses, no RNA stage; Polyomaviridae; Polyomavirus.  
OX NCBI\_TaxID=10629;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=22379369; PubMed=12490781;  
RA Li R.M., Mannon R.B., Kleiner D., Tsokos M., Bynum M., Kirk A.D.,  
RA Kopp J.B.;  
RT "BK virus and SV40 co-infection in polyomavirus nephropathy.";  
RL Transplantation 74:1497-1504(2002).  
RN [2]  
RP SEQUENCE FROM N.A.  
RA Li R.-M., Kopp J.B.;  
RL Submitted (NOV-2001) to the EMBL/GenBank/DBJ databases.  
DR EMBL; AF442822; AAL78918.1; --  
DR GO; GO:0003677; F:DNA binding; IEA.  
DR InterPro; IPR002643; Polyoma\_agn0.  
DR Pfam; PF01736; Polyoma\_agn0; 1.  
DR ProDom; PD004470; Polyoma\_agn0; 1.  
FT NON TER 21  
SQ SEQUENCE 21 AA; 2361 MW; 65D57BD9AE20D4F6 CRC64;

Query Match 48.7%; Score 19; DB 2; Length 21;  
Best Local Similarity 50.0%; Pred. No. 9e+03; 2; Indels 0; Gaps 0;  
Matches 4; Conservative 2; Mismatches 0; Gaps 0;  
QY 1 RAFVTIGK 8  
Db 9 QASVKLGK 16

Search completed: May 16, 2005, 08:10:01  
Job time : 170 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 16, 2005, 07:55:20 ; Search time 37 Seconds  
(without alignments)  
20.804 Million cell updates/sec

Title: SEQ1

Perfect score: 39

Sequence: 1 rafvttgk 8

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 4989

Minimum DB seq length: 0

Maximum DB seq length: 25

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

1: pir1.\*

2: pir2.\*

3: pir3.\*

4: pir4.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

| Result No. | Score | Query Match | Length | DB ID    | Description        |
|------------|-------|-------------|--------|----------|--------------------|
| 1          | 36    | 92.3        | 20     | 2 S65399 | immunodeficiency v |
| 2          | 22    | 56.4        | 25     | 2 B44524 | pregnancy-specific |
| 3          | 19    | 48.7        | 10     | 2 D28027 | protein P7 - curle |
| 4          | 19    | 48.7        | 12     | 2 P20907 | ig kappa-2 chain J |
| 5          | 19    | 48.7        | 14     | 2 S11074 | alcohol dehydrogen |
| 6          | 19    | 48.7        | 22     | 2 B90996 | probable transcrip |
| 7          | 19    | 48.7        | 22     | 2 PT0052 | translation initia |
| 8          | 18    | 46.2        | 12     | 2 S11286 | exo-alpha-sialidas |
| 9          | 18    | 46.2        | 15     | 2 S21238 | hydrogenulfite re  |
| 10         | 18    | 46.2        | 15     | 2 PA0106 | protein QP200076 - |
| 11         | 18    | 46.2        | 20     | 2 FL0145 | carbon-monoxide de |
| 12         | 18    | 46.2        | 21     | 2 A20359 | translation elonga |
| 13         | 18    | 46.2        | 23     | 2 S43289 | cytochrome-c oxida |
| 14         | 18    | 46.2        | 24     | 2 S47563 | nucleoside-diphosp |
| 15         | 18    | 46.2        | 24     | 2 PX0038 | methemoglobin redu |
| 16         | 17    | 43.6        | 10     | 2 C58501 | 48k bile/gallbladd |
| 17         | 17    | 43.6        | 12     | 2 S10626 | lipovitellin - Afr |
| 18         | 17    | 43.6        | 13     | 2 S63492 | dissimulatory sulf |
| 19         | 17    | 43.6        | 14     | 2 PH1347 | ig heavy chain DJ  |
| 20         | 17    | 43.6        | 14     | 2 PA0109 | porin por 1B - Ara |
| 21         | 17    | 43.6        | 14     | 2 PA0045 | porin por1 - Arabi |
| 22         | 17    | 43.6        | 15     | 2 S13973 | chlorophyll a/b-bi |
| 23         | 17    | 43.6        | 17     | 2 A46592 | lactase-phlorizin  |
| 24         | 17    | 43.6        | 18     | 2 C56046 | urinary tract ston |
| 25         | 17    | 43.6        | 20     | 2 PL0161 | hemagglutinin - In |
| 26         | 17    | 43.6        | 20     | 2 S03505 | T-cell receptor al |
| 27         | 17    | 43.6        | 20     | 2 S05411 | carboxylesterase ( |
| 28         | 17    | 43.6        | 20     | 2 B47642 | T-cell surface gly |
| 29         | 17    | 43.6        | 21     | 2 I49414 | gene CTLA-1 protei |

|    |      |      |    |          |                      |
|----|------|------|----|----------|----------------------|
| 30 | 17   | 43.6 | 21 | 2 S47202 | T-cell receptor J-   |
| 31 | 17   | 43.6 | 23 | 2 A47415 | mannose-1-phosphat   |
| 32 | 17   | 43.6 | 24 | 2 T46622 | hypothetical prote   |
| 33 | 17   | 43.6 | 24 | 2 S07699 | T-cell receptor al   |
| 34 | 17   | 43.6 | 25 | 2 S65729 | hemoglobin, extrac   |
| 35 | 16.5 | 42.3 | 21 | 2 S61410 | pyruvate, phosphat   |
| 36 | 16   | 41.0 | 12 | 2 S65629 | protoporphyrinogen   |
| 37 | 16   | 41.0 | 12 | 2 A60757 | enterotoxin C-1 -    |
| 38 | 16   | 41.0 | 14 | 2 PN0151 | omega-gliadine 2'    |
| 39 | 16   | 41.0 | 14 | 2 PN0147 | omega-gliadine 1'    |
| 40 | 16   | 41.0 | 14 | 2 B61597 | cytochrome P450 AL   |
| 41 | 16   | 41.0 | 16 | 2 JN0264 | translational initia |
| 42 | 16   | 41.0 | 16 | 2 D83865 | hypothetical prote   |
| 43 | 16   | 41.0 | 16 | 2 T14224 | NADH2 dehydrogenas   |
| 44 | 16   | 41.0 | 17 | 2 I78870 | gene RB1 protein -   |
| 45 | 16   | 41.0 | 17 | 2 A37823 | dihydrolipoamide S   |

#### ALIGNMENTS

##### RESULT 1

S65399

immunodeficiency virus type 1, HIV-1 gp120 - human (fragments)

C;Species: Homo sapiens (man)  
C;Date: 28-Oct-1996 #sequence\_revision 13-Mar-1997 #text\_change 17-Mar-1999

C;Accession: S65399

R;Niwa, Y.; Yano, M.; Futaki, S.; Okumura, Y.; Kido, H.

Eur. J. Biochem. 237, 64-70, 1996

A;Title: T-cell membrane-associated serine protease, tryptase TL(2), binds human immunod

man immunodeficiency virus type 1 inhibit cleavage of gp120.

A;Reference number: S65399; MUID:96203909; PMID:8620895

A;Accession: S65399

A;Status: preliminary

A;Molecule type: protein

A;Residues: 1-10,11-20 <NIW>

C;Superfamily: type B retrovirus env polyprotein

Query Match 92.3%; Score 36; DB 2; Length 20;

Best Local Similarity 87.5%; Pred. No. 0.11;

Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTTGK 8

Db 5 RAFVTTGR 12

|||||:

##### RESULT 2

B44524

pregnancy-specific glycoprotein SBU-3-62 - sheep (fragment)

C;Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)

C;Date: 30-Sep-1993 #sequence\_revision 30-Sep-1993 #text\_change 16-Aug-2004

C;Accession: B44524

R;Atkinson, Y.H.

submitted to the Protein Sequence Database, June 1993

A;Reference number: A44524

A;Accession: B44524

A;Status: preliminary

A;Molecule type: protein

A;Residues: 1-25 <ATK>

A;Cross-references: UNIPROT:Q9TREI

C;Superfamily: Pepsin

C;Keywords: glycoprotein

Query Match 56.4%; Score 22; DB 2; Length 25;

Best Local Similarity 57.1%; Pred. No. 2.6e+02;

Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 RAFVTTIG 7

Db 17 RGXITIG 23

|||||

## RESULT 3

D28027  
 protein P7 - curled-leaved tobacco (fragment)  
 C:Species: Nicotiana glauca (curled-leaved tobacco)  
 C:Date: 19-May-1989 #sequence\_revision 19-May-1989 #text\_change 09-Jul-2004  
 C:Accession: D28027  
 R:Bauw, G.; De Loose, M.; Inze, D.; Van Montagu, M.; Vandekerckhove, J.  
 Proc. Natl. Acad. Sci. U.S.A. 84, 4806-4810, 1987  
 A:Title: Alterations in the phenotype of plant cells studied by NH2-terminal amino acid-  
 A:Reference number: A94167  
 A:Accession: D28027  
 A:Molecule type: protein  
 A:Residues: 1-10 <BAU>  
 A:Cross-references: UNIPROT:Q7M1V8

Query Match 48.7%; Score 19; DB 2; Length 10;  
 Best Local Similarity 66.7%; Pred. No. 5.3e+02;  
 Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RAFTVI 6  
 | : | | |  
 Db 4 RSFVPI 9

## RESULT 4

F20907  
 Ig kappa-2 chain J5 chain - rabbit  
 C:Species: Oryctolagus cuniculus (domestic rabbit)  
 C:Date: 10-Aug-1990 #sequence\_revision 10-Aug-1990 #text\_change 05-Nov-1999  
 C:Accession: F20907  
 R:Emorine, L.; Max, E.E.  
 Nucleic Acids Res. 11, 8877-8890, 1983  
 A:Title: Structural analysis of a rabbit immunoglobulin kappa2 J-C locus reveals multiple  
 A:Reference number: A20907; MUID:84169523; PMID:6324107  
 A:Accession: F20907  
 A:Status: preliminary  
 A:Molecule type: DNA  
 A:Residues: 1-12 <EMO>  
 A:Cross-references: GB:X00232; NID:gl1582; PIDN:CAA5055.1; PID:e8281; PID:gl364239  
 C:Keywords: heterotetramer; immunoglobulin

Query Match 48.7%; Score 19; DB 2; Length 12;  
 Best Local Similarity 60.0%; Pred. No. 6.3e+02;  
 Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 4 VTIGK 8  
 | : | |  
 Db 1 ITFGK 5

## RESULT 5

S11074  
 alcohol dehydrogenase (EC 1.1.1.1) - Baltic cod (fragments)  
 C:Species: Gadus morhua callarias (Baltic cod)  
 C:Date: 30-Jun-1991 #sequence\_revision 30-Jun-1991 #text\_change 31-Jan-1997  
 C:Accession: S11074  
 R:Egestad, B.; Estonius, M.; Danielsson, O.; Persson, B.; Cederlund, E.; Kaiser, R.; Hol  
 FEBS Lett. 269, 194-196, 1990  
 A:Title: Fast atom bombardment mass spectrometry and chemical analysis in determinations  
 A:Reference number: S11074; MUID:90353571; PMID:2387402  
 A:Accession: S11074  
 A:Molecule type: protein  
 A:Residues: 1-5; 6-14 <EGE>  
 C:Keywords: acetylated amino end; alcohol metabolism; NAD; oxidoreductase  
 F:1/Modified site: acetylated amino end (Ala) #status experimental

Query Match 48.7%; Score 19; DB 2; Length 14;  
 Best Local Similarity 75.0%; Pred. No. 7.4e+02;  
 Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 5 TIGK 8  
 | : | |  
 Db 2 TVGK 5

## RESULT 6

B90996  
 probable transcription regulator [imported] - Escherichia coli (strain O157:H7, substrain  
 C:Species: Escherichia coli  
 C:Date: 18-Jul-2001 #sequence\_revision 18-Jul-2001 #text\_change 09-Jul-2004  
 C:Accession: B90996  
 R:Hayashi, T.; Makino, K.; Ohnishi, M.; Kurokawa, K.; Ishii, K.; Yokoyama, K.; Han, C.G.;  
 Gasawara, N.; Yasunaga, T.; Kuhara, S.; Shiba, T.; Hattori, M.; Shinagawa, H.  
 DNA Res. 8, 11-22, 2001  
 A:Title: Complete genome sequence of enterohemorrhagic Escherichia coli O157:H7 and genom  
 A:Reference number: A99629; MUID:21156231; PMID:11258796  
 A:Accession: B90996  
 A:Status: preliminary  
 A:Molecule type: DNA  
 A:Residues: 1-22 <HAY>  
 A:Cross-references: UNIPROT:Q8X365; GB:BA000007; PIDN:BA836361.1; PID:gl33362407; GSPDB:GB  
 C:Experimental source: strain O157:H7, substrain RIMD 0509952  
 C:Genetics:  
 A:Gene: ECS2938

Query Match 48.7%; Score 19; DB 2; Length 22;  
 Best Local Similarity 57.1%; Pred. No. 1.2e+03;  
 Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 2 AFVTIGK 8  
 | : | | |  
 Db 2 ALYTIIG 8

## RESULT 7

PT0052  
 translation initiation factor eIF-2 gamma chain - pig (fragment)  
 C:Species: Sus scrofa domestica (domestic pig)  
 C:Date: 17-Jul-1992 #sequence\_revision 17-Jul-1992 #text\_change 09-Jul-2004  
 C:Accession: PT0052  
 R:Suzuki, H.; Mukoyama, E.B.  
 Agric. Biol. Chem. 52, 1397-1408, 1988  
 A:Title: Pig liver translational initiation factor eIF-2: N-terminal amino acid sequences  
 A:Reference number: PT0051  
 A:Accession: PT0052  
 A:Molecule type: protein  
 A:Residues: 1-22 <SUZ>  
 A:Cross-references: UNIPROT:P20461  
 A:Experimental source: liver  
 C:Keywords: protein biosynthesis

Query Match 48.7%; Score 19; DB 2; Length 22;  
 Best Local Similarity 57.1%; Pred. No. 1.2e+03;  
 Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 AFVTIGK 8  
 | : | | |  
 Db 5 AGVTILGQ 11

## RESULT 8

S11286  
 exo-alpha-sialidase (EC 3.2.1.18) - influenza A virus (strain A/FPV/Rostock/34 [H7N1])  
 N:Alternate names: neuraminidase  
 C:Species: Influenza A virus  
 C:Date: 31-Dec-1990 #sequence\_revision 31-Dec-1990 #text\_change 22-Jun-1999  
 C:Accession: S11286  
 R:Robertson, J.S.  
 Nucleic Acids Res. 6, 3745-3757, 1979  
 A:Title: 5' and 3' terminal nucleotide sequences of the RNA genome segments of influenza  
 A:Reference number: S11286; MUID:80034428; PMID:493121  
 A:Accession: S11286  
 A:Molecule type: genomic RNA  
 A:Residues: 1-12 <ROB>  
 A:Cross-references: EMBL:J02114; NID:g324483; PIDN:AAA43398.1; PID:g324486  
 C:Genetics:



A;Map position: segment 6  
 C;Superfamily: influenza virus exo-alpha-sialidase  
 C;Keywords: glycosidase; hydrolase

Query Match 46.2%; Score 18; DB 2; Length 12;  
 Best Local Similarity 75.0%; Pred. No. 1.1e+03;  
 Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 4 VTIG 7  
 :|||  
 Db 8 ITIG 11

RESULT 9  
 S21238  
 hydrogen sulfite reductase (EC 1.8.99.3) beta chain - Desulfovibrio vulgaris (fragment)  
 N;Alternate names: bisulfite reductase; desulfofusicidin; desulforubidin; desulfovibrin;  
 C;Species: Desulfovibrio vulgaris  
 C;Date: 19-Mar-1997 #sequence\_revision 11-Jun-1999 #text\_change 11-Jun-1999  
 C;Accession: S21238  
 R;Pierik, A.J.; Duyvis, M.G.; van Helvoort, J.M.L.M.; Wolbert, R.B.G.; Hagen, W.R.  
 Eur. J. Biochem. 205, 111-115, 1992  
 A;Title: The third subunit of desulfovibrin-type dissimilatory sulfite reductases.  
 A;Reference number: S21197; MUID:92209491; PMID:1555572  
 A;Accession: S21238  
 A;Molecule type: protein  
 A;Residues: 1-15 <PIE>  
 A;Experimental source: strain Hildenborough  
 C;Genetics:  
 A;Gene: dsbB  
 A;Complex: heterohexamer; two alpha, two beta and two gamma chains  
 C;Function:  
 A;Description: catalyzes the six-electron reduction of sulfite to sulfide  
 A;Pathway: the terminal oxidase in the sulfate-reduction pathway  
 C;Keywords: heterohexamer; oxidoreductase

Query Match 46.2%; Score 18; DB 2; Length 15;  
 Best Local Similarity 50.0%; Pred. No. 1.4e+03;  
 Matches 3; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 AFVTIG 7  
 :||:|  
 Db 1 AFISGG 6

RESULT 10  
 PA0106  
 protein QP200076 - fungus (Fusarium sporotrichioides) (fragment)  
 C;Species: Fusarium sporotrichioides  
 C;Date: 20-Feb-1995 #sequence\_revision 20-Feb-1995 #text\_change 09-Jul-2004  
 C;Accession: PA0106  
 R;Chow, L.P.; Fukaya, N.; Sugiura, Y.; Ueno, Y.; Tabuchi, K.; Tsugita, A.  
 submitted to JIPID, October 1994  
 A;Description: Two dimensional polyacrylamide gel electrophoresis of Fusarium sporotrichi  
 A;Reference number: PA0051  
 A;Accession: PA0106  
 A;Molecule type: protein  
 A;Residues: 1-15 <CHO>  
 A;Cross-references: UNIPROT:Q7M4Y1

Query Match 46.2%; Score 18; DB 2; Length 15;  
 Best Local Similarity 50.0%; Pred. No. 1.4e+03;  
 Matches 3; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 AFVTIG 7  
 :||:|  
 Db 4 AILTIG 9

RESULT 11  
 PL0145  
 carbon-monoxide dehydrogenase (EC 1.2.99.2) small chain - Pseudomonas carboxydoflava (fr  
 C;Species: Pseudomonas carboxydoflava

C;Date: 07-Sep-1990 #sequence\_revision 07-Sep-1990 #text\_change 28-Apr-1993  
 C;Accession: PL0145  
 R;Kraut, M.; Hugendieck, I.; Herwig, S.; Meyer, O.  
 Arch. Microbiol. 152, 335-341, 1989  
 A;Title: Homology and distribution of CO dehydrogenase structural genes in carboxydofl  
 A;Reference number: PL0138; MUID:90055678; PMID:2818128  
 A;Accession: PL0145  
 A;Molecule type: protein  
 A;Residues: 1-20 <KRA>  
 C;Comment: Carbon-monoxide dehydrogenase consists of three polypeptide chains: large, me  
 C;Keywords: oxidoreductase

Query Match 46.2%; Score 18; DB 2; Length 20;  
 Best Local Similarity 60.0%; Pred. No. 1.8e+03;  
 Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 4 VTIGK 8  
 :|||  
 Db 8 VNVGK 12

RESULT 12  
 A20359  
 translation elongation factor EF-Tu, mitochondrial - rabbit (fragment)  
 C;Species: Oryctolagus cuniculus (domestic rabbit)  
 C;Date: 05-Jun-1987 #sequence\_revision 05-Jun-1987 #text\_change 09-Jul-2004  
 C;Accession: A20359  
 R;Slobin, L.I.; Clark, R.V.; Olson, M.O.J.  
 Biochemistry 22, 1911-1917, 1983  
 A;Title: Limited cleavage of eucaryotic elongation factor Tu by trypsin: alignment of th  
 A;Reference number: A20359; MUID:83204805; PMID:6682677  
 A;Accession: A20359  
 A;Molecule type: protein  
 A;Residues: 1-21 <SLQ>  
 A;Cross-references: UNIPROT:Q7M2K3  
 A;Note: residue 19 has also been sequenced as Lys  
 C;Keywords: mitochondrion; protein biosynthesis

Query Match 46.2%; Score 18; DB 2; Length 21;  
 Best Local Similarity 75.0%; Pred. No. 1.9e+03;  
 Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 4 VTIG 7  
 :|||  
 Db 16 ITIG 19

RESULT 13  
 S43289  
 cytochrome-c oxidase (EC 1.9.3.1) chain III - Blastocrithidia culicis mitochondrion (fra  
 C;Species: mitochondrion Blastocrithidia culicis  
 C;Date: 19-Mar-1997 #sequence\_revision 01-May-1998 #text\_change 09-Jul-2004  
 C;Accession: S43289  
 R;Maslov, D.A.; Avila, H.A.; Lake, J.A.; Simpson, L.  
 Nature 368, 345-348, 1994  
 A;Title: Evolution of RNA editing in kinetoplastid protozoa.  
 A;Reference number: S43286; MUID:94173338; PMID:8127370  
 A;Accession: S43289  
 A;Molecule type: mRNA  
 A;Residues: 1-23 <MAS>  
 A;Cross-references: UNIPROT:Q33549  
 A;Experimental source: ATCC30268  
 C;Genetics:  
 A;Gene: COIII  
 A;Genome: mitochondrion  
 A;Genetic code: SGC6  
 C;Superfamily: cytochrome-c oxidase chain III  
 C;Keywords: electron transfer; membrane-associated complex; mitochondrion inner membrane  
 in

Query Match 46.2%; Score 18; DB 2; Length 23;  
 Best Local Similarity 75.0%; Pred. No. 2.1e+03;  
 Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 4 VTIG 7  
: : :  
Db 7 ITIG 10

RESULT 14  
S47563  
nucleoside-diphosphate kinase (EC 2.7.4.6) - oat (fragment)  
C:Species: Avena sativa (oat)  
C>Date: 07-May-1995 #sequence\_revision 24-Oct-1997 #text\_change 09-Jul-2004  
C:Accession: S47563  
R;Sommer, D.; Song, P.S.  
Biochim. Biophys. Acta 1222, 464-470, 1994  
A:Title: A plant nucleoside diphosphate kinase homologous to the human Nm23 gene product  
A:Reference number: S47563; MUID:94312444; PMID:8038216  
A:Accession: S47563  
A>Status: preliminary  
A:Molecule type: protein  
A:Residues: 1-24 <SOW>  
A:Cross-references: UNIPROT:Q988M2  
C:Superfamily: nucleoside diphosphate kinase  
C:Keywords: phosphotransferase; pyrimidine nucleotide biosynthesis

Query Match 46.2%; Score 18; DB 2; Length 24;  
Best Local Similarity 50.0%; Pred. No. 2.2e+03;  
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 RAFVTI 6  
: : :  
Db 5 RTFIAI 10

RESULT 15  
PX0038  
methemoglobin reductase (NADPH) (EC 1.6.2.-) - bullfrog (fragment)  
C:Species: Rana catesbeiana (bullfrog)  
C>Date: 17-Jul-1992 #sequence\_revision 17-Jul-1992 #text\_change 09-Jul-2004  
R;Abe, Y.; Ito, T.; Okazaki, T.  
J. Biochem. 108, 255-260, 1990  
A:Title: Purification and characterization of NADPH-dependent methemoglobin reductase from  
A:Reference number: PX0038; MUID:91035356; PMID:2172227  
A:Accession: PX0038  
A:Molecule type: protein  
A:Residues: 1-24 <ABP>  
A:Cross-references: UNIPROT:P55736  
A:Experimental source: nucleated erythrocyte  
C:Keywords: NADP; oxidoreductase

Query Match 46.2%; Score 18; DB 2; Length 24;  
Best Local Similarity 60.0%; Pred. No. 2.2e+03;  
Matches 3; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 4 VTIGK 8  
: : :  
Db 17 VTIGQ 21

RESULT 16  
G58501  
48K bile/gallbladder stone protein - unidentified bacterium (fragment)  
C:Species: unidentified bacterium  
C>Date: 07-Feb-1997 #sequence\_revision 07-Feb-1997 #text\_change 09-Jul-2004  
C:Accession: G58501  
R;Binette, J.P.; Binette, M.B.  
submitted to the Protein Sequence Database, October 1996  
A:Description: The proteins of kidney and gallbladder stones.  
A:Reference number: A58501  
A:Accession: G58501  
A>Status: preliminary  
A:Molecule type: protein  
A:Residues: 1-10 <BIN>

A:Cross-references: UNIPROT:Q7M1C8  
A:Experimental source: human bile and gallbladder stones  
A>Note: 1-Ser and 4-Glu were also found

Query Match 43.6%; Score 17; DB 2; Length 10;  
Best Local Similarity 66.7%; Pred. No. 1.6e+03;  
Matches 4; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 FVTIGK 8  
: : :  
Db 3 FVEDGK 8

RESULT 17  
S10626  
lipovitellin - African clawed frog  
C:Species: Xenopus laevis (African clawed frog)  
C>Date: 18-Feb-1994 #sequence\_revision 10-Nov-1995 #text\_change 10-Nov-1995  
C:Accession: S10626  
R;Wallace, R.A.; Hoch, K.L.; Carnevali, O.  
J. Mol. Biol. 213, 407-409, 1990  
A:Title: Placement of small lipovitellin subunits within the vitellogenin precursor in X.  
A:Reference number: S10624; MUID:90278951; PMID:2352275  
A:Accession: S10626  
A:Molecule type: protein  
A:Residues: 1-12 <WAL>

Query Match 43.6%; Score 17; DB 2; Length 12;  
Best Local Similarity 62.5%; Pred. No. 1.9e+03;  
Matches 5; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
: : :  
Db 4 RAARTGK 11

RESULT 18  
S63492  
disulfidylary sulfite reductase beta chain, soluble - Desulfovibrio desulfuricans (fragm  
C:Species: Desulfovibrio desulfuricans  
C>Date: 28-Oct-1996 #sequence\_revision 13-Mar-1997 #text\_change 17-Mar-1999  
C:Accession: S63492  
R;Steuber, J.; Arendsen, A.F.; Hagen, W.R.; Kroneck, P.M.H.  
Eur. J. Biochem. 233, 873-879, 1995  
A:Title: Molecular properties of the dissimilatory sulfite reductase from Desulfovibrio  
A:Reference number: S63489; MUID:96085152; PMID:8521853  
A:Accession: S63492  
A>Status: preliminary  
A:Molecule type: protein  
A:Residues: 1-13 <STE>

Query Match 43.6%; Score 17; DB 2; Length 13;  
Best Local Similarity 50.0%; Pred. No. 2e+03;  
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 AFVTIG 7  
: : :  
Db 1 AFITPG 6

RESULT 19  
PH1347  
IG heavy chain DJ region (clone C100-103A) - human (fragment)  
C:Species: Homo sapiens (man)  
C>Date: 30-Sep-1993 #sequence\_revision 30-Sep-1993 #text\_change 07-May-1999  
C:Accession: PH1347  
R;Wasserman, R.; Galili, N.; Ito, Y.; Reichard, B.A.; Shane, S.; Rovera, G.  
J. Exp. Med. 176, 1577-1581, 1992  
A:Title: Predominance of fetal type DJH joining in young children with B precursor lymph  
A:Reference number: PH1302; MUID:93094761; PMID:1460419  
A:Accession: PH1347  
A:Molecule type: DNA  
A:Residues: 1-14 <WAS>

C;Keywords: heterotetramer; immunoglobulin

Query Match 43.6%; Score 17; DB 2; Length 14;  
Best Local Similarity 60.0%; Pred. No. 2.2e+03;  
Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 3 FVTIG 7  
|:|  
Db 6 FLTTG 10

# RESULT 20

PA0109

porin por 1B - Arabidopsis thaliana (fragment)

C;Species: Arabidopsis thaliana (mouse-ear cress)

C;Date: 07-Apr-1995 #sequence\_revision 26-May-1995 #text\_change 09-Jul-2004

C;Accession: PA0109

R;Kamo, M.; Kawakami, T.; Taugita, A.

submitted to JIPID, March 1995

A;Reference number: PA0109

A;Accession: PA0109

A;Molecule type: protein

A;Residues: 1-14 <KAM>

A;Cross-references: UNIPROT:Q8LA84; UNIPROT:Q42292

A;Experimental source: root

Query Match 43.6%; Score 17; DB 2; Length 14;  
Best Local Similarity 50.0%; Pred. No. 2.2e+03;  
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 3 FVTIGK 8  
|:|  
Db 7 YTEIGK 12

# RESULT 21

PA0045

porin por1 - Arabidopsis thaliana (fragment)

C;Species: Arabidopsis thaliana (mouse-ear cress)

C;Date: 30-Jun-1992 #sequence\_revision 06-Jan-1995 #text\_change 09-Jul-2004

C;Accession: PA0045

R;Kamo, M.; Kawakami, T.; Miyatake, N.; Taugita, A.

submitted to JIPID, July 1994

A;Description: Separation and characterization of Arabidopsis proteins by two-dimensional

A;Reference number: PA0001

A;Accession: PA0045

A;Molecule type: protein

A;Residues: 1-14 <KAM>

A;Cross-references: UNIPROT:Q7M1W9

A;Experimental source: root

Query Match 43.6%; Score 17; DB 2; Length 14;  
Best Local Similarity 50.0%; Pred. No. 2.2e+03;  
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 3 FVTIGK 8  
|:|  
Db 7 YTEIGK 12

# RESULT 22

SI3973

chlorophyll a/b-binding protein type II - garden pea (fragment)

C;Species: Pisum sativum (garden pea)

C;Date: 19-Mar-1997 #sequence\_revision 24-Mar-1999 #text\_change 24-Mar-1999

C;Accession: SI3973

R;Jahn, P.; Junge, W.

Eur. J. Biochem. 193, 731-736, 1990

A;Title: Dicyclohexylcarbodiimide-binding proteins related to the short circuit of the p

A;Reference number: SI3973; MUID:91065379; PMID:2174365

A;Accession: SI3973

A;Molecule type: protein

A;Residues: 1-15 <JAH>

A;Title: Class I major histocompatibility complex-restricted T lymphocyte recognition of

C;Genetics:

A;Genome: nuclear

C;Keywords: chlorophyll; chloroplast; light-harvesting complex; thylakoid; transmembrane

Query Match 43.6%; Score 17; DB 2; Length 15;  
Best Local Similarity 60.0%; Pred. No. 2.3e+03;  
Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 3 FVTIG 7  
|:|  
Db 6 FTSIG 10

# RESULT 23

A46592

lactase-phlorizin hydrolase, 200K isoform - rat (fragment)

C;Species: Rattus norvegicus (Norway rat)

C;Date: 16-Feb-1994 #sequence\_revision 18-Nov-1994 #text\_change 01-Nov-1996

C;Accession: A46592

R;Dudley, M.A.; Hachey, D.L.; Quaroni, A.; Hutchens, T.W.; Nichols, B.L.; Rosenberger, J.

J. Biol. Chem. 268, 13609-13616, 1993

A;Title: In vivo sucrose-isomaltase and lactase-phlorizin hydrolase turnover in the fed

A;Reference number: A46592; MUID:93293888; PMID:8514793

A;Accession: A46592

A;Status: preliminary

A;Molecule type: protein

A;Residues: 1-17 <DUD>

A;Note: sequence extracted from NCBI backbone (NCBIP:134559)

C;Keywords: carbohydrate digestion; intestine

Query Match 43.6%; Score 17; DB 2; Length 17;  
Best Local Similarity 42.9%; Pred. No. 2.6e+03;  
Matches 3; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 1 RAFPVTIG 7  
|:|  
Db 5 RNFAAG 11

# RESULT 24

C56046

urinary tract stone matrix protein 5, 32K - human (fragment)

C;Species: Homo sapiens (man)

C;Date: 12-Apr-1995 #sequence\_revision 12-Apr-1995 #text\_change 09-Jul-2004

C;Accession: C56046

R;Binette, J.P.; Binette, M.B.; Gawinowicz, M.A.; Kendrick, N.

submitted to the Protein Sequence Database, February 1995

A;Description: Isolation, characterization and sequence of stone proteins.

A;Reference number: A56046

A;Accession: C56046

A;Status: preliminary

A;Molecule type: protein

A;Residues: 1-18 <BIN>

A;Cross-references: UNIPROT:Q7M4Q7

Query Match 43.6%; Score 17; DB 2; Length 18;  
Best Local Similarity 28.6%; Pred. No. 2.8e+03;  
Matches 2; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

Qy 1 RAFPVTIG 7  
|:|  
Db 9 RTYAAVG 15

# RESULT 25

PL0161

hemagglutinin - Influenza H2N2 (fragment)

C;Species: influenza H2N2

C;Date: 20-Feb-1995 #sequence\_revision 20-Feb-1995 #text\_change 09-Jul-2004

C;Accession: PL0161

R;Sweetser, M.T.; Braciare, V.L.; Braciare, T.J.

J. Exp. Med. 170, 1357-1368, 1989

A;Title: Class I major histocompatibility complex-restricted T lymphocyte recognition of

A;Reference number: PL0161; MUID:90010790; PMID:2477491

A;Accession: PL0161

A;Molecule type: mRNA

A;Residues: 1-20 <SWB>

A;Cross-references: UNIPROT:Q7LZU6

A;Experimental source: strain A/JAP/305/57

C;Comment: This protein plays a major role in the pathogenesis of influenza virus hemagglutinin

C;Superfamily: Influenza virus hemagglutinin

F;1-20/Region: immunodominant site recognized by T-lymphocytes

Query Match 43.6%; Score 17; DB 2; Length 20;

Best Local Similarity 60.0%; Pred. No. 3.1e+03;

Matches 2; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 3 FVTIG 7

Db 10 YVSVG 14

RESULT 26

S03505

T-cell receptor alpha chain J region (80) - mouse (fragment)

C;Species: Mus musculus (house mouse)

C;Date: 28-Feb-1990 #sequence\_revision 28-Feb-1990 #text\_change 30-May-1997

C;Accession: S03505

R;Wintoto, A.; Mjolsness, S.; Hood, L.

Nature 316, 832-836, 1985

A;Title: Genomic organization of the genes encoding mouse T-cell receptor alpha-chain.

A;Reference number: S03503; MUID:85296332; PMID:2993908

A;Accession: S03505

A;Molecule type: DNA

A;Residues: 1-20 <WTN>

A;Cross-references: EMBL:X02859

A;Note: This sequence was determined from the germline gene

C;Keywords: T-cell receptor

Query Match 43.6%; Score 17; DB 2; Length 20;

Best Local Similarity 60.0%; Pred. No. 3.1e+03;

Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 4 VTIGK 8

Db 8 LTFGK 12

RESULT 27

S05411

carboxylesterase (EC 3.1.1.1) - Sulfolobus acidocaldarius (fragment)

N;Alternate names: serine esterase

C;Species: Sulfolobus acidocaldarius

C;Date: 07-Sep-1990 #sequence\_revision 07-Sep-1990 #text\_change 09-Jul-2004

C;Accession: S05411

R;Sobek, H.; Goerlich, H.

Biochem. J. 261, 993-998, 1989

A;Title: Further kinetic and molecular characterization of an extremely heat-stable carb

A;Reference number: S05411; MUID:90026296; PMID:2508625

A;Accession: S05411

A;Molecule type: protein

A;Residues: 1-20 <SOB>

A;Cross-references: UNIPROT:Q7M529

A;Note: 1-Ala and 1-Ser were also found

C;Keywords: carboxylic ester hydrolase; tetramer

Query Match 43.6%; Score 17; DB 2; Length 20;

Best Local Similarity 60.0%; Pred. No. 3.1e+03;

Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 4 VTIGK 8

Db 16 IPIGK 20

RESULT 28

B47642

T-cell surface glycoprotein CD4 - sheep (fragment)

C;Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)

C;Date: 31-Dec-1993 #sequence\_revision 31-Dec-1993 #text\_change 09-Jul-2004

C;Accession: B47642

R;Classon, B.J.; Tsagaratos, J.; Kirszbaum, L.; Maddox, J.; Mackay, C.R.; Brandon, M.; M

Immunogenetics 23, 129-132, 1986

A;Title: The L3T4 antigen in mouse and the sheep equivalent are immunoglobulin-like.

A;Reference number: A47642; MUID:86166694; PMID:3082751

A;Accession: B47642

A;Status: preliminary

A;Molecule type: protein

A;Residues: 1-20 <CLA>

A;Cross-references: UNIPROT:P05542

C;Keywords: glycoprotein

Query Match 43.6%; Score 17; DB 2; Length 20;

Best Local Similarity 60.0%; Pred. No. 3.1e+03;

Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 4 VTIGK 8

Db 16 IPIGK 20

RESULT 29

I49414

Gene CTLA-1 protein - western wild mouse (fragment)

C;Species: Mus spretus (western wild mouse)

C;Date: 02-Jul-1996 #sequence\_revision 02-Jul-1996 #text\_change 09-Jul-2004

C;Accession: I49414

R;Ko, M.S.; Wang, X.; Horton, J.H.; Hagen, M.D.; Takahashi, N.; Maezaki, Y.; Nadeau, J.H

Mamm. Genome 5, 349-355, 1994

A;Title: Genetic mapping of 40 cDNA clones on the mouse genome by PCR.

A;Reference number: I49414; MUID:94319082; PMID:8043949

A;Accession: I49414

A;Status: preliminary; translated from GB/EMBL/DBJ

A;Molecule type: DNA

A;Residues: 1-21 <RES>

A;Cross-references: UNIPROT:Q62538; EMBL:U05708; MID:g497037; PIDN:AAB60471.1; PID:g49703

C;Genetics:

A;Gene: Ctla-1

C;Superfamily: trypsin; trypsin homology

Query Match 43.6%; Score 17; DB 2; Length 21;

Best Local Similarity 50.0%; Pred. No. 3.2e+03;

Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 RAFVTI 6

Db 2 RAFTKV 7

RESULT 30

S47202

T-cell receptor J-alpha wntX.1 - human (fragment)

C;Species: Homo sapiens (man)

C;Date: 06-Feb-1995 #sequence\_revision 06-Feb-1995 #text\_change 23-Jul-1999

C;Accession: S47202

R;Plaza, A.; Kono, D.H.; Theofilopoulos, A.N.

submitted to the EMBL Data Library, February 1993

A;Reference number: S40133

A;Accession: S47202

A;Status: preliminary

A;Molecule type: mRNA

A;Residues: 1-21 <PIA>

A;Cross-references: EMBL:X71039; MID:g506908; PIDN:CAA50356.1; PID:g510654

C;Superfamily: immunoglobulin V region; immunoglobulin homology

C;Keywords: T-cell receptor

Query Match 43.6%; Score 17; DB 2; Length 21;

Best Local Similarity 60.0%; Pred. No. 3.2e+03;

Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 RAFVTI 6

Db 2 RAFTKV 7

Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 4 VTIGK 8  
: |||  
Db 9 LTFGK 13

RESULT 31  
A47415  
mannose-1-phosphate guanylyltransferase (EC 2.7.7.13) 37K beta chain - pig (fragment)  
A;Alternate names: GDP-mannose pyrophosphorylase 37K beta chain  
C;Species: Sus scrofa domestica (domestic pig)  
C;Date: 25-Feb-1994 #sequence\_revision 12-Aug-1996 #text\_change 09-Jul-2004  
A;Accession: A47415  
R;Summilo, T.; Drake, R.R.; York, J.L.; Elbein, A.D.  
J. Biol. Chem. 268, 17943-17950, 1993  
A;Title: GDP-mannose pyrophosphorylase. Purification to homogeneity, properties, and utilization in the synthesis of mannose-1-phosphate  
A;Reference number: A47415; MUID:93352609; PMID:7688733  
A;Contents: liver  
A;Accession: A47415  
A;Molecule type: protein  
A;Residues: 1-23 <SZU>  
A;Cross-references: UNIPROT:Q9TRF4  
A;Note: sequence extracted from NCBI backbone (NCBIP:136438)  
C;Complex: The enzyme appears to be a heterodimer of alpha and beta chains.  
C;Function:  
A;Description: Generates GDP-mannose and pyrophosphate from mannose-1-phosphate and GTP  
A;Note: also catalyzes synthesis of GDP-glucose from glucose-1-phosphate (EC 2.7.7.34 and EC 2.7.7.35)  
C;Superfamily: mannose-1-phosphate guanylyltransferase  
C;Keywords: nucleotidyltransferase

Query Match 43.6%; Score 17; DB 2; Length 23;  
Best Local Similarity 28.6%; Pred. No. 3.5e+03;  
Matches 2; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

Qy 1 RAFVTIG 7  
: : :  
Db 2 KALILVG 8

RESULT 32  
T46622  
hypothetical protein c1 - loblolly pine  
C;Species: Pinus taeda (loblolly pine)  
C;Date: 18-Feb-2000 #sequence\_revision 18-Feb-2000 #text\_change 18-Feb-2000  
A;Accession: T46622  
R;Chang, S.; Puryear, J.; Funkhouser, E.A.; Newton, R.J.; Cairney, J.  
Submitted to the EMBL Data Library, July 1995  
A;Description: Cloning of a chitinase homolog which lacks chitin binding sites and is deduced from cDNA  
A;Reference number: Z23105  
A;Accession: T46622  
A;Status: preliminary; translated from GB/EMBL/DBJ  
A;Molecule type: mRNA  
A;Residues: 1-24 <CHA>  
A;Cross-references: EMBL:U31309; NID:9974285; PID:9974287  
A;Experimental source: strain s6PT2xs6PT3; 8 month seedlings

Query Match 43.6%; Score 17; DB 2; Length 24;  
Best Local Similarity 57.1%; Pred. No. 3.7e+03;  
Matches 4; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 RAFVTIG 7  
: |||  
Db 7 RAFTCQG 13

RESULT 33  
S07699  
T-cell receptor alpha chain J segment (DT) - mouse (fragment)  
C;Species: Mus musculus (house mouse)  
C;Date: 29-Jan-1993 #sequence\_revision 29-Jan-1993 #text\_change 05-Nov-1999  
A;Accession: S07699  
R;Yague, J.; Blackman, M.; Born, W.; Marrack, P.; Kappler, J.; Palmer, E.

Nucleic Acids Res. 16, 11355-11364, 1988  
A;Title: The structure of V-alpha and J-alpha segments in the mouse.  
A;Reference number: S06466; MUID:89083566; PMID:2849763  
A;Accession: S07699  
A;Molecule type: mRNA  
A;Residues: 1-24 <YAG>  
A;Cross-references: EMBL:M38675; NID:g201207; PIDN:AAA40193.1; PID:g201208  
A;Experimental source: strain Balb/c  
C;Genetics:  
A;Map position: 14  
C;Keywords: glycoprotein; heterodimer; T-cell receptor  
F;1-22/Domain: J segment <JSE>  
F;23-24/Domain: C region (fragment) <CRE>

Query Match 43.6%; Score 17; DB 2; Length 24;  
Best Local Similarity 60.0%; Pred. No. 3.7e+03;  
Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 4 VTIGK 8  
: |||  
Db 10 LTFGK 14

RESULT 34  
S65729  
hemoglobin, extracellular, chain d2 - earthworm (Lumbricus terrestris) (fragment)  
C;Species: Lumbricus terrestris (common earthworm)  
C;Date: 06-Dec-1996 #sequence\_revision 13-Mar-1997 #text\_change 09-Jul-2004  
A;Accession: S65729  
R;Fushitani, K.; Higashiyama, K.; Asao, M.; Hosokawa, K.  
Biochim. Biophys. Acta 1292, 273-280, 1996  
A;Title: Characterization of the constituent polypeptides of the extracellular hemoglobin  
A;Reference number: S65721; MUID:96176855; PMID:8597573  
A;Accession: S65729  
A;Status: preliminary  
A;Molecule type: protein  
A;Residues: 1-25 <FUS>  
A;Cross-references: UNIPROT:Q9TWE4  
C;Keywords: oxygen carrier

Query Match 43.6%; Score 17; DB 2; Length 25;  
Best Local Similarity 80.0%; Pred. No. 3.9e+03;  
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RAFVT 5  
: |||  
Db 16 RAFTGT 20

RESULT 35  
S61410  
pyruvate, phosphate dikinase (EC 2.7.9.1), cytosolic - Flaveria trinervia (fragment)  
C;Species: Flaveria trinervia  
C;Date: 27-Apr-1996 #sequence\_revision 13-Mar-1997 #text\_change 09-Jul-2004  
A;Accession: S61410  
R;Rosche, E.; Westhoff, P.  
Plant Mol. Biol. 29, 663-678, 1995  
A;Title: Genomic structure and expression of the pyruvate, orthophosphate dikinase gene  
A;Reference number: S61409; MUID:96128009; PMID:8541493  
A;Accession: S61410  
A;Status: preliminary  
A;Molecule type: DNA  
A;Residues: 1-21 <ROS>  
A;Cross-references: UNIPROT:Q42739; EMBL:X79095  
A;Note: it is uncertain whether Met-1 or Met-18 is the initiator  
C;Superfamily: pyruvate, phosphate dikinase  
C;Keywords: transferase

Query Match 42.3%; Score 16.5; DB 2; Length 21;  
Best Local Similarity 62.5%; Pred. No. 4.2e+03;  
Matches 5; Conservative 0; Mismatches 2; Indels 1; Gaps 1;

Qy 1 RAFVTIGK 8

Db 3 RVFTGK 9

RESULT 36  
S65629  
protoporphyrinogen oxidase (EC 1.3.3.4) - bovine (fragment)  
C:Species: Bos primigenius taurus (cattle)  
C:Date: 14-Feb-1997 #sequence\_revision 13-Mar-1997 #text\_change 26-May-2000  
C:Accession: S65629  
R:Takekani, S.; Yoshinaga, T.; Furukawa, R.; Kohno, H.; Tokunaga, R.; Nishimura, K.; Ino, J. Biochem. 230, 760-765, 1995  
A:Title: Induction of terminal enzymes for heme biosynthesis during differentiation of erythroid cells  
A:Reference number: S65629; MUID:95331315; PMID:7607249  
A:Accession: S65629  
A:Molecule type: protein  
A:Residues: 1-12 <TAK>  
C:Genetics:  
A:Genome: nuclear  
C:Function:  
A:Pathway: heme biosynthesis; porphyrin biosynthesis  
C:Superfamily: phytoene dehydrogenase  
C:Keywords: heme biosynthesis; mitochondrion; oxidoreductase; porphyrin biosynthesis

Query Match 41.0%; Score 16; DB 2; Length 12;  
Best Local Similarity 42.9%; Pred. No. 3.2e+03;  
Matches 3; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 1 RAFVTIG 7  
| | | |  
Db 2 RTVVVLG 8

RESULT 37  
A60757  
enterotoxin C-1 - Staphylococcus aureus (fragments)  
C:Species: Staphylococcus aureus  
C:Date: 14-May-1993 #sequence\_revision 14-May-1993 #text\_change 30-Sep-1993  
C:Accession: A60757  
R:Bonach, G.A.; Handley, J.P.; Schlievert, P.M.  
Infect. Immun. 57, 23-28, 1989  
A:Title: Biological and immunological properties of the carboxyl terminus of staphylococcal enterotoxin C-1  
A:Reference number: A60757; MUID:89079292; PMID:2909489  
A:Accession: A60757  
A>Status: preliminary  
A:Molecule type: protein  
A:Residues: 1-12 <BOH>

Query Match 41.0%; Score 16; DB 2; Length 12;  
Best Local Similarity 80.0%; Pred. No. 3.2e+03;  
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 4 VTIGK 8  
| | | |  
Db 7 VTGGK 11

RESULT 38  
PN0151  
omega-gliadine 2' - Aegilops longissima (fragment)  
C:Species: Aegilops longissima  
C:Date: 30-Sep-1993 #sequence\_revision 30-Sep-1993 #text\_change 07-May-1999  
C:Accession: PN0151  
R:Odintsova, T.I.; Egorov, T.A.  
Biochimica 55, 509-516, 1990  
A:Title: N-terminal sequences of omega-gliadins of Aegilops longissima: On the origin of wheat gliadins  
A:Reference number: PN0146; MUID:90283493; PMID:2354218  
A:Accession: PN0151  
A:Molecule type: protein  
A:Residues: 1-14 <ODI>  
A:Experimental source: strain K-907

Query Match 41.0%; Score 16; DB 2; Length 14;  
Best Local Similarity 80.0%; Pred. No. 3.2e+03;  
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Best Local Similarity 50.0%; Pred. No. 3.7e+03;  
Matches 4; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
| | | |  
Db 2 ROISPIGK 9

RESULT 39  
PN0147  
omega-gliadine 1 and 2 - Aegilops longissima (fragment)  
C:Species: Aegilops longissima  
C:Date: 30-Sep-1993 #sequence\_revision 30-Sep-1993 #text\_change 09-Jul-2004  
C:Accession: PN0147; PN0146  
R:Odintsova, T.I.; Egorov, T.A.  
Biochimica 55, 509-516, 1990  
A:Title: N-terminal sequences of omega-gliadins of Aegilops longissima: On the origin of wheat gliadins  
A:Reference number: PN0146; MUID:90283493; PMID:2354218  
A:Accession: PN0147  
A:Molecule type: protein  
A:Residues: 1-14 <ODI>  
A:Cross-references: UNIPROT:O7M1V5  
A:Experimental source: strain K-202  
A:Note: omega-gliadine 2 (amino-terminal fragment)  
A:Accession: PN0146  
A:Molecule type: protein  
A:Residues: 1-9 <OD2>  
A:Experimental source: strain K-202  
A:Note: omega-gliadine 1 (amino-terminal fragment)

Query Match 41.0%; Score 16; DB 2; Length 14;  
Best Local Similarity 50.0%; Pred. No. 3.7e+03;  
Matches 4; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
| | | |  
Db 2 RQLSPIGK 9

RESULT 40  
B61597  
cytochrome P450 AL-2 - rat (fragment)  
C:Species: Rattus norvegicus (Norway rat)  
C:Date: 06-Jan-1995 #sequence\_revision 06-Jan-1995 #text\_change 09-Jul-2004  
C:Accession: B61597  
R:Shimeno, H.; Toda, A.; Ogata, S.; Nagamatsu, A.  
Drug Metab. Dispos. 19, 291-297, 1991  
A:Title: Purification and aminopyrine monooxygenase activity of liver microsomal cytochrome P450 AL-2  
A:Reference number: A61597; MUID:91292910; PMID:1676625  
A:Accession: B61597  
A>Status: preliminary  
A:Molecule type: protein  
A:Residues: 1-14 <SHI>  
A:Cross-references: UNIPROT:Q7M047

Query Match 41.0%; Score 16; DB 2; Length 14;  
Best Local Similarity 33.3%; Pred. No. 3.7e+03;  
Matches 2; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 2 AFVTIG 7  
| | | |  
Db 8 SFLLVG 13

RESULT 41  
JN0264  
translation initiation factor eIF-2 gamma chain - pig (fragment)  
N:Alternate names: eIF2 gamma chain  
C:Species: Sus scrofa domestica (domestic pig)  
C:Date: 09-Oct-1992 #sequence\_revision 09-Oct-1992 #text\_change 09-Jul-2004  
C:Accession: JN0264  
R:Mukoyama, E.B.; Shiohara, H.; Suzuki, H.  
Biochem. Biophys. Res. Commun. 188, 680-681, 1992

A;Title: GTP-binding sequences in the gamma subunit of pig liver initiation factor 2.

A;Reference number: JN0264; MUID:92282179; PMID:1368212

A;Accession: JN0264

A;Molecule type: protein

A;Residues: 1-16 <MUK>

A;Cross-references: UNIPROT:Q9TRQ9

A;Experimental source: liver

C;Keywords: GTP binding

F;1-16/Region: GTP binding #status experimental

Query Match 41.0%; Score 16; DB 2; Length 16;

Best Local Similarity 42.9%; Pred. No. 4.2e+03;

Matches 3; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 1 RAFVTIG 7

Db 1 QATINIG 7

#### RESULT 42

D83865

A;Title: hypothetical protein BH1724 [imported] - Bacillus halodurans (strain C-125)

C;Species: Bacillus halodurans

C;Date: 01-Dec-2000 #sequence\_revision 01-Dec-2000 #text\_change 09-Jul-2004

C;Accession: D83865

R;Takami, H.; Nakasone, K.; Takaki, Y.; Maeno, G.; Sasaki, R.; Masui, N.; Fuji, F.; Hira

Nucleic Acids Res. 28, 4317-4331, 2000

A;Title: Complete genome sequence of the alkaliphilic bacterium Bacillus halodurans and

A;Reference number: A83650; MUID:20512582; PMID:11058132

A;Accession: D83865

A;Status: preliminary

A;Molecule type: DNA

A;Residues: 1-16 <STO>

A;Cross-references: UNIPROT:Q9KC50; GB:AP001512; GB:BA000004; NID:G10174030; PIDN:BA0054

A;Experimental source: strain C-125

C;Genetics:

A;Gene: BH1724

Query Match 41.0%; Score 16; DB 2; Length 16;

Best Local Similarity 60.0%; Pred. No. 4.2e+03;

Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 4 VTIGK 8

Db 4 ITQCK 8

#### RESULT 43

T14224

A;Title: NADH2 dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 6 - Euhadra herklotsi mitochondrion

C;Species: mitochondrion Euhadra herklotsi

C;Date: 20-Sep-1999 #sequence\_revision 20-Sep-1999 #text\_change 09-Jul-2004

C;Accession: T14224

R;Yamazaki, N.; Ueshima, R.; Terrett, J.A.; Yokobori, S.; Kaifu, M.; Segawa, R.; Kobayashi

submitted to the EMBL Data Library, May 1996

A;Description: Evolution of pulmonate gastropod mitochondrial genomes: Comparisons of co

A;Reference number: Z17932

A;Accession: T14224

A;Status: preliminary; translated from GB/EMBL/DBJ

A;Molecule type: DNA

A;Residues: 1-16 <YAM>

A;Cross-references: UNIPROT:P92070; EMBL:Z71694; NID:e912660; PID:e244560; PIDN:CAA96364

A;Experimental source: adult; hepatopancreas

C;Genetics:

A;Genome: mitochondrion

C;Keywords: mitochondrion; NAD; oxidoreductase

Query Match 41.0%; Score 16; DB 2; Length 16;

Best Local Similarity 33.3%; Pred. No. 4.2e+03;

Matches 2; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 AFVTIG 7

Db 9 SFLLVG 14

#### RESULT 44

I78870

A;Title: Gene Rb1 protein - human (fragment)

C;Species: Homo sapiens (man)

C;Date: 02-Aug-1996 #sequence\_revision 02-Aug-1996 #text\_change 09-Jul-2004

C;Accession: I78870

R;Hogg, A.; Onadim, Z.; Baird, P.N.; Cowell, J.K.

Oncogene 7, 1445-1451, 1992

A;Title: Detection of heterozygous mutations in the Rb1 gene in retinoblastoma patients

A;Reference number: I58362; MUID:92319557; PMID:1352398

A;Accession: I78870

A;Status: preliminary; translated from GB/EMBL/DBJ

A;Molecule type: DNA

A;Residues: 1-17 <RES>

A;Cross-references: UNIPROT:Q92727; GB:L41911; NID:G794004; PIDN:AAB59483.1; PID:G794005

C;Genetics:

A;Gene: GDB:RB1

A;Cross-references: GDB:118734; OMIM:180200

A;Map position: 13q14.3-13q14.3

Query Match 41.0%; Score 16; DB 2; Length 17;

Best Local Similarity 60.0%; Pred. No. 4.5e+03;

Matches 3; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 4 VTIGK 8

Db 3 VSIGE 7

#### RESULT 45

A37823

A;Title: dihydrolipoamide S-acetyltransferase (EC 2.3.3.1.12) - bovine (fragment)

C;Species: Bos primigenius taurus (cattle)

C;Date: 30-Apr-1991 #sequence\_revision 30-Apr-1991 #text\_change 09-Jul-2004

C;Accession: A37823

R;Rahmatullah, M.; Radke, G.A.; Andrews, P.C.; Roche, T.E.

J. Biol. Chem. 265, 14512-14517, 1990

A;Title: Changes in the core of the mammalian-pyruvate dehydrogenase complex upon selecti

A;Reference number: A37823; MUID:90354445; PMID:2167319

A;Accession: A37823

A;Status: preliminary

A;Molecule type: protein

A;Residues: 1-17 <RAH>

A;Cross-references: UNIPROT:Q7M2M8

C;Keywords: acyltransferase; coenzyme A

Query Match 41.0%; Score 16; DB 2; Length 17;

Best Local Similarity 60.0%; Pred. No. 4.5e+03;

Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFVT 5

Db 5 RVFVS 9

Search completed: May 16, 2005, 08:10:44

Job time : 39 secs

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GenCore version 5.1.6  
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: May 16, 2005, 12:53:32 ; Search time 18.0769 Seconds  
(without alignments)  
79.839 Million cell updates/sec

Title: US-08-869-386-1

Perfect score: 77  
Sequence: 1 RIQPGGRAFTVIGK 15

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 4989

Minimum DB seq length: 0  
Maximum DB seq length: 25

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : PIR\_79.\*  
1: pir1.\*  
2: pir2.\*  
3: pir3.\*  
4: pir4.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID    | Description          |
|------------|-------|-------------|--------|----------|----------------------|
| 1          | 60    | 77.9        | 20     | 2 S65399 | immunodeficiency v   |
| 2          | 27    | 35.1        | 20     | 2 S48654 | Plasmeprin II - ma   |
| 3          | 26.5  | 34.4        | 14     | 2 PA0109 | porin por 1B - Ara   |
| 4          | 26.5  | 34.4        | 14     | 2 PA0045 | porin por1 - Arabi   |
| 5          | 25    | 32.5        | 10     | 2 D28027 | protein P7 - curle   |
| 6          | 25    | 32.5        | 12     | 2 S11286 | exo-alpha-sialidas   |
| 7          | 25    | 32.5        | 25     | 2 S21197 | hydrogensulfite re   |
| 8          | 24.5  | 31.8        | 17     | 2 A37823 | dihydrolipoamide S   |
| 9          | 24    | 31.2        | 7      | 2 PT0515 | T-cell receptor be   |
| 10         | 24    | 31.2        | 13     | 2 C53275 | Ig kappa-1 chain J   |
| 11         | 24    | 31.2        | 14     | 2 PH0915 | T-cell receptor be   |
| 12         | 24    | 31.2        | 20     | 2 S63490 | disinflammatory sulf |
| 13         | 24    | 31.2        | 21     | 2 S31427 | biliary glycoprote   |
| 14         | 24    | 31.2        | 22     | 2 C42856 | hypothetical prote   |
| 15         | 24    | 31.2        | 24     | 2 B60422 | MSEL-neurophysin -   |
| 16         | 24    | 31.2        | 25     | 2 D41575 | hominin-like pept    |
| 17         | 23.5  | 30.5        | 13     | 2 P80453 | 36K protein 3124 -   |
| 18         | 23    | 29.9        | 10     | 2 S65388 | cytochrome-c oxida   |
| 19         | 23    | 29.9        | 17     | 2 AF2093 | heterocyst-inhibit   |
| 20         | 23    | 29.9        | 20     | 2 S77991 | cytochrome-c oxida   |
| 21         | 22    | 28.6        | 12     | 2 S65629 | protoporphyrinogen   |
| 22         | 22    | 28.6        | 20     | 2 S31220 | 82K protein - bovi   |
| 23         | 22    | 28.6        | 20     | 2 DIRT   | dental fluid tra     |
| 24         | 22    | 28.6        | 21     | 2 A60225 | pyruvate dehydroge   |
| 25         | 22    | 28.6        | 23     | 2 PQ0070 | T-cell receptor be   |
| 26         | 22    | 28.6        | 23     | 2 S47192 | T-cell receptor J-   |
| 27         | 22    | 28.6        | 25     | 2 S22221 | peroxidase (EC 1.1   |
| 28         | 22    | 28.6        | 25     | 2 B44524 | pregnancy-specific   |
| 29         | 22    | 28.6        | 25     | 2 S10850 | alpha-amylase inhi   |

30 21 27.3 10 2 S77990  
31 21 27.3 13 2 S33800  
32 21 27.3 14 2 PH1347  
33 21 27.3 16 2 H41299  
34 21 27.3 16 2 A42411  
35 21 27.3 16 2 I51879  
36 21 27.3 18 2 S09722  
37 21 27.3 19 2 I49037  
38 21 27.3 22 2 A39269  
39 21 27.3 24 4 T01780  
40 20.5 26.6 18 2 A25941  
41 20 26.0 11 2 S13279  
42 20 26.0 15 2 S43634  
43 20 26.0 15 2 D28587  
44 20 26.0 15 2 C34874  
45 20 26.0 16 2 PH1790

cytochrome-c oxida  
chaperone, TCP1-re  
Ig heavy chain D  
T-cell receptor al  
myosin light chain  
cystathionine beta  
2S albumin small c  
TCR delta chain V-  
LX-1 tumor antigen  
probable gag polym  
Ig heavy chain J-H  
Ile-Sar-bradykinin  
cytochrome-c oxida  
T-cell receptor be  
transforming prote  
T cell receptor al

ALIGNMENTS

RESULT 1

S65399  
immunodeficiency virus type 1, HIV-1 gp120 - human (fragments)  
C:Species: Homo sapiens (man)  
C:Date: 28-Oct-1996 #sequence\_revision 13-Mar-1997 #text\_change 17-Mar-1999  
C:Accession: S65399  
R:Niwa, Y.; Yano, M.; Futaki, S.; Okumura, Y.; Kido, H.  
Eur. J. Biochem. 237, 64-70, 1996  
A:Title: T-cell membrane-associated serine protease, tryptase TL(2), binds human immunode  
man immunodeficiency virus type 1 inhibit cleavage of gp120.  
A:Reference number: S65399; MUID:96203909; PMID:8620895  
A:Accession: S65399  
A>Status: preliminary  
A:Molecule type: protein  
A:Residues: 1-10,11-20 <NIW>  
C:Superfamily: type E retrovirus env polyprotein

Query Match 77.9%; Score 60; DB 2; Length 20;  
Best Local Similarity 91.7%; Pred. No. 0.00082;  
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTIGK 15  
DB 1 RGPGRFVTIGR 12  
|||||  
|||||

RESULT 2

S48654  
Plasmeprin II - malaria parasite (Plasmodium falciparum)  
C:Species: Plasmodium falciparum  
C:Date: 15-Jul-1995 #sequence\_revision 19-Apr-1996 #text\_change 09-Jun-2000  
C:Accession: S48654  
R:Hill, J.; Tyas, L.; Phylip, L.H.; Kay, J.; Dunn, B.M.; Berry, C.  
FEBS Lett. 352, 155-158, 1994  
A:Title: High level expression and characterisation of Plasmeprin II, an aspartic protei  
A:Reference number: S48654; MUID:95010698; PMID:7925966  
A:Accession: S48654  
A>Status: preliminary  
A:Molecule type: DNA  
A:Residues: 1-20 <HIL>

Query Match 35.1%; Score 27; DB 2; Length 20;  
Best Local Similarity 50.0%; Pred. No. 4.2e+02;  
Matches 6; Conservative 1; Mismatches 5; Indels 0; Gaps 0;

QY 3 QRGPGRFVTIG 14  
DB 9 QMGRGSEHLTIG 20  
|||  
|||

RESULT 3

PA0109

porin por 1B - Arabidopsis thaliana (fragment)  
C:Species: Arabidopsis thaliana (mouse-ear cress)  
C:Date: 07-Apr-1995 #sequence\_revision 26-May-1995 #text\_change 09-Jul-2004  
C:Accession: PA0109  
R:Kano, M.; Kawakami, T.; Tsugita, A.  
submitted to JIPID, March 1995  
A:Reference number: PA0109  
A:Accession: PA0109  
A:Molecule type: protein  
A:Residues: 1-14 <RAM>  
A:Cross-references: UNIPROT:Q8LA84; UNIPROT:Q42292  
A:Experimental source: root

Query Match 34.4%; Score 26.5; DB 2; Length 14;  
Best Local Similarity 50.0%; Pred. No. 3.7e+02;  
Matches 6; Conservative 2; Mismatches 3; Indels 1; Gaps 1;

QY 4 RQPGRAFVTIGK 15  
DB 2 KQPG-LYTEIGK 12

RESULT 4  
PA0045  
porin por1 - Arabidopsis thaliana (fragment)  
C:Species: Arabidopsis thaliana (mouse-ear cress)  
C:Date: 30-Jun-1992 #sequence\_revision 06-Jan-1995 #text\_change 09-Jul-2004  
C:Accession: PA0045  
R:Kano, M.; Kawakami, T.; Miyatake, N.; Tsugita, A.  
submitted to JIPID, July 1994  
A:Description: Separation and characterization of Arabidopsis proteins by two-dimensions  
A:Reference number: PA0001  
A:Accession: PA0045  
A:Molecule type: protein  
A:Residues: 1-14 <RAM>  
A:Cross-references: UNIPROT:Q7MIW9  
A:Experimental source: root

Query Match 34.4%; Score 26.5; DB 2; Length 14;  
Best Local Similarity 50.0%; Pred. No. 3.7e+02;  
Matches 6; Conservative 2; Mismatches 3; Indels 1; Gaps 1;

QY 4 RQPGRAFVTIGK 15  
DB 2 KQPG-LYTEIGK 12

RESULT 5  
D28027  
protein P7 - curled-leaved tobacco (fragment)  
C:Species: Nicotiana glauca (curled-leaved tobacco)  
C:Date: 19-May-1989 #sequence\_revision 19-May-1989 #text\_change 09-Jul-2004  
C:Accession: D28027  
R:Bauw, G.; De Loose, M.; Inze, D.; Van Montagu, M.; Vandekerckhove, J.  
Proc. Natl. Acad. Sci. U.S.A. 84, 4806-4810, 1987  
A:Title: Alterations in the phenotype of plant cells studied by NH2-terminal amino acid  
A:Reference number: A94167  
A:Accession: D28027  
A:Molecule type: protein  
A:Residues: 1-10 <BAU>  
A:Cross-references: UNIPROT:Q7MIW8

Query Match 32.5%; Score 25; DB 2; Length 10;  
Best Local Similarity 71.4%; Pred. No. 5e+02;  
Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 7 GRAFVTI 13  
DB 3 GRSFVPI 9

RESULT 6  
S11286

porin por 1B - Arabidopsis thaliana (fragment)  
C:Species: Arabidopsis thaliana (mouse-ear cress)  
C:Date: 07-Apr-1995 #sequence\_revision 26-May-1995 #text\_change 09-Jul-2004  
C:Accession: PA0109  
R:Kano, M.; Kawakami, T.; Tsugita, A.  
submitted to JIPID, March 1995  
A:Reference number: PA0109  
A:Accession: PA0109  
A:Molecule type: protein  
A:Residues: 1-14 <RAM>  
A:Cross-references: UNIPROT:Q8LA84; UNIPROT:Q42292  
A:Experimental source: root

Query Match 34.4%; Score 26.5; DB 2; Length 14;  
Best Local Similarity 50.0%; Pred. No. 3.7e+02;  
Matches 6; Conservative 2; Mismatches 3; Indels 1; Gaps 1;

QY 4 RQPGRAFVTIGK 15  
DB 2 KQPG-LYTEIGK 12

RESULT 4  
PA0045  
porin por1 - Arabidopsis thaliana (fragment)  
C:Species: Arabidopsis thaliana (mouse-ear cress)  
C:Date: 30-Jun-1992 #sequence\_revision 06-Jan-1995 #text\_change 09-Jul-2004  
C:Accession: PA0045  
R:Kano, M.; Kawakami, T.; Miyatake, N.; Tsugita, A.  
submitted to JIPID, July 1994  
A:Description: Separation and characterization of Arabidopsis proteins by two-dimensions  
A:Reference number: PA0001  
A:Accession: PA0045  
A:Molecule type: protein  
A:Residues: 1-14 <RAM>  
A:Cross-references: UNIPROT:Q7MIW9  
A:Experimental source: root

Query Match 34.4%; Score 26.5; DB 2; Length 14;  
Best Local Similarity 50.0%; Pred. No. 3.7e+02;  
Matches 6; Conservative 2; Mismatches 3; Indels 1; Gaps 1;

QY 4 RQPGRAFVTIGK 15  
DB 2 KQPG-LYTEIGK 12

RESULT 5  
D28027  
protein P7 - curled-leaved tobacco (fragment)  
C:Species: Nicotiana glauca (curled-leaved tobacco)  
C:Date: 19-May-1989 #sequence\_revision 19-May-1989 #text\_change 09-Jul-2004  
C:Accession: D28027  
R:Bauw, G.; De Loose, M.; Inze, D.; Van Montagu, M.; Vandekerckhove, J.  
Proc. Natl. Acad. Sci. U.S.A. 84, 4806-4810, 1987  
A:Title: Alterations in the phenotype of plant cells studied by NH2-terminal amino acid  
A:Reference number: A94167  
A:Accession: D28027  
A:Molecule type: protein  
A:Residues: 1-10 <BAU>  
A:Cross-references: UNIPROT:Q7MIW8

Query Match 32.5%; Score 25; DB 2; Length 10;  
Best Local Similarity 71.4%; Pred. No. 5e+02;  
Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 7 GRAFVTI 13  
DB 3 GRSFVPI 9

RESULT 6  
S11286

exo-alpha-sialidase (EC 3.2.1.18) - influenza A virus (strain A/FPV/Rostock/34 [H7N1]) (1  
N:Alternate names: neuraminidase  
C:Species: influenza A virus  
C:Date: 31-Dec-1990 #sequence\_revision 31-Dec-1990 #text\_change 22-Jun-1999  
C:Accession: S11286  
R:Robertson, J.S.  
Nucleic Acids Res. 6, 3745-3757, 1979  
A:Title: 5' and 3' terminal nucleotide sequences of the RNA genome segments of influenza  
A:Reference number: S11286; MUID:80034428; PMID:493121  
A:Accession: S11286  
A:Molecule type: genomic RNA  
A:Residues: 1-12 <ROB>  
A:Cross-references: EMBL:J02114; NID:g324483; PIDN:AAA43398.1; PID:g324486  
C:Genetics:  
A:Map position: segment 6  
C:Superfamily: influenza virus exo-alpha-sialidase  
C:Keywords: glycosidase; hydrolase

Query Match 32.5%; Score 25; DB 2; Length 12;  
Best Local Similarity 44.4%; Pred. No. 5.9e+02;  
Matches 4; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

QY 6 PGRAFVTIG 14  
DB 3 PNQKIITIG 11

RESULT 7  
S21197  
hydrogensulfite reductase (EC 1.8.99.3) alpha chain - Desulfovibrio vulgaris (fragment)  
N:Alternate names: bisulfite reductase; desulfosulfidin; desulfosulfidin; desulfosulfidin;  
C:Species: Desulfovibrio vulgaris  
C:Date: 19-Mar-1997 #sequence\_revision 11-Jun-1999 #text\_change 09-Jul-2004  
C:Accession: S21197  
R:Pierik, A.J.; Duyvis, M.G.; van Helvoort, J.M.L.M.; Wolbert, R.B.G.; Hagen, W.R.  
Eur. J. Biochem. 205, 111-115, 1992  
A:Title: The third subunit of desulfovibrio-type dissimilatory sulfite reductases.  
A:Reference number: S21197; MUID:92209491; PMID:1555572  
A:Accession: S21197  
A:Molecule type: protein  
A:Residues: 1-25 <PIE>  
A:Cross-references: UNIPROT:P45574  
A:Experimental source: strain Hildenborough  
C:Genetics:  
A:Gene: dsvc  
C:Complex: heterohexamer; two alpha, two beta and two gamma chains  
C:Function:  
A:Description: catalyzes the six-electron reduction of sulfite to sulfide  
A:Pathway: the terminal oxidase in the sulfate-reduction pathway  
C:Keywords: heterohexamer; oxidoreductase

Query Match 32.5%; Score 25; DB 2; Length 25;  
Best Local Similarity 36.4%; Pred. No. 1.2e+03;  
Matches 4; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

QY 1 RIQPGRAFVF 11  
DB 10 QLESQPMXSFV 20

RESULT 8  
A37823  
dihydrolipoamide S-acetyltransferase (EC 2.3.1.12) - bovine (fragment)  
C:Species: Bos primigenius taurus (cattle)  
C:Date: 30-Apr-1991 #sequence\_revision 30-Apr-1991 #text\_change 09-Jul-2004  
C:Accession: A37823  
R:Rahmatullah, M.; Radke, G.A.; Andrews, P.C.; Roche, T.E.  
J. Biol. Chem. 265, 14512-14517, 1990  
A:Title: Changes in the core of the mammalian pyruvate dehydrogenase complex upon selecti  
A:Reference number: A37823; MUID:90354445; PMID:2167319  
A:Accession: A37823  
A>Status: preliminary  
A:Molecule type: protein

A;Residues: 1-17 <RAH>  
A;Cross-references: UNIPROT:Q7M2M8  
C;Keywords: acyltransferase; coenzyme A

Query Match 31.8%; Score 24.5; DB 2; Length 17;  
Best Local Similarity 66.7%; Pred. No. 9.9e+02;  
Matches 6; Conservative 1; Mismatches 1; Indels 1; Gaps 1;

QY 5 GP-GRAPVT 12  
Db 1 GPKGRVFS 9

## RESULT 9

PT0515  
T-cell receptor beta chain V-D-J region (100-4AE) - mouse (fragment)  
C;Species: Mus musculus (house mouse)  
C;Date: 17-Jul-1992 #sequence\_revision 17-Jul-1992 #text\_change 30-May-1997  
C;Accession: PT0515  
R;Feeney, A.J.

J. Exp. Med. 174, 115-124, 1991  
A;Title: Junctional sequences of fetal T cell receptor beta chains have few N regions.  
A;Reference number: PT0509; MUID:91277601; PMID:1711558  
A;Accession: PT0515  
A;Status: translation not shown  
A;Molecule type: mRNA  
A;Residues: 1-7 <FEE>  
A;Experimental source: adult thymus, strain BALB/c  
C;Keywords: T-cell receptor

Query Match 31.2%; Score 24; DB 2; Length 7;  
Best Local Similarity 80.0%; Pred. No. 2.8e+05;  
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 5 GPGRA 9  
Db 3 GPGQA 7

## RESULT 10

C53275  
Ig kappa-1 chain J3 segment b95 allotype - rabbit (fragment)  
C;Species: Oryctolagus cuniculus (domestic rabbit)  
C;Date: 02-May-1994 #sequence\_revision 18-Nov-1994 #text\_change 16-Aug-1996  
C;Accession: C53275  
R;Ayadi, H.; Marche, P.N.; Cazenave, P.A.  
Immunogenetics 34, 201-207, 1991  
A;Title: Evolution of the rabbit immunoglobulin kappa chain genes.  
A;Reference number: A53275; MUID:91372868; PMID:1909995  
A;Accession: C53275  
A;Status: preliminary  
A;Molecule type: DNA  
A;Residues: 1-13 <AYA>  
A;Note: sequence extracted from NCBI backbone (NCBIN:56069, NCBIP:56164)  
C;Comment: This J3 segment may not be functional because of substitutions in the 7 mer  
C;Keywords: heterotetramer; immunoglobulin

Query Match 31.2%; Score 24; DB 2; Length 13;  
Best Local Similarity 100.0%; Pred. No. 9.5e+02; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPQ 7  
Db 3 RGPQ 6

## RESULT 11

PH0915  
T-cell receptor beta chain V-D-J region (isolate 1) - rat (fragment)  
C;Species: Rattus norvegicus (Norway rat)  
C;Date: 09-Oct-1992 #sequence\_revision 09-Oct-1992 #text\_change 30-May-1997  
C;Accession: PH0915  
R;Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.

J. Exp. Med. 174, 1467-1476, 1991

A;Title: Analysis of T cell receptor beta chains in Lewis rats with experimental allergic  
A;Reference number: PH0891; MUID:92078857; PMID:1836012  
A;Accession: PH0915  
A;Molecule type: mRNA  
A;Residues: 1-14 <GOL>  
A;Experimental source: concanavalin A-activated lymphoblast  
A;Note: the authors translated the codon GGG for residue 8 as Glu and GAG for residue 9  
C;Keywords: T-cell receptor

Query Match 31.2%; Score 24; DB 2; Length 14;  
Best Local Similarity 50.0%; Pred. No. 1e+03;  
Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 3 QRGPGRAF 10  
Db 4 RRGTGAEV 11

## RESULT 12

S63490  
disulfidyl sulfito reductase alpha chain, soluble - Desulfovibrio desulfuricans (frag  
C;Species: Desulfovibrio desulfuricans  
C;Date: 28-Oct-1996 #sequence\_revision 13-Mar-1997 #text\_change 09-Jul-2004  
C;Accession: S63490  
R;Steuber, J.; Arendsen, A.F.; Hagen, W.R.; Kroneck, P.M.H.  
Eur. J. Biochem. 233, 873-879, 1995  
A;Title: Molecular properties of the dissimilatory sulfito reductase from Desulfovibrio  
A;Reference number: S63489; MUID:96085152; PMID:8521853  
A;Accession: S63490  
A;Status: preliminary  
A;Molecule type: protein  
A;Residues: 1-20 <STE>  
A;Cross-references: UNIPROT:Q9R4H4

Query Match 31.2%; Score 24; DB 2; Length 20;  
Best Local Similarity 36.4%; Pred. No. 1.4e+03;  
Matches 4; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

QY 1 RIQPGPGRAFV 11  
Db 10 QLESGPWPSFV 20

## RESULT 13

S31427  
biliary glycoprotein - human  
C;Species: Homo sapiens (man)  
C;Date: 13-Jan-1995 #sequence\_revision 13-Jan-1995 #text\_change 07-Feb-1997  
C;Accession: S31427  
R;Nedellec, P.; Turbide, C.; Barnett, T.R.; Beauchemin, N.  
submitted to the EMBL Data Library, July 1992  
A;Description: Characterization of the human biliary glycoprotein regulatory region.  
A;Reference number: S31427  
A;Accession: S31427  
A;Status: preliminary  
A;Molecule type: DNA  
A;Residues: 1-21 <NED>  
A;Cross-references: EMBL:X67277  
C;Keywords: glycoprotein

Query Match 31.2%; Score 24; DB 2; Length 21;  
Best Local Similarity 80.0%; Pred. No. 1.5e+03;  
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 PGRAF 10  
Db 14 PGRGF 18

## RESULT 14

C42856  
hypothetical protein 3 EPF-region [imported] - human (fragment)

C;Species: Homo sapiens (man)  
 C;Date: 10-Jun-1993 #sequence\_revision 18-Nov-1994 #text\_change 20-Jun-2000  
 C;Accession: C42856  
 R;Liu, Z.; Diaz, L.A.; Haas, A.L.; Giudice, G.J.  
 J. Biol. Chem. 267, 15829-15835, 1992  
 A;Title: cDNA cloning of a novel human ubiquitin carrier protein. An antigenic domain of this human epidermal transcript.  
 A;Reference number: A42856; MUID:92348449; PMID:1379239  
 A;Accession: C42856  
 A;Status: preliminary  
 A;Molecule type: mRNA  
 A;Residues: 1-22 <LIU>  
 A;Experimental source: keratinocyte  
 A;Note: sequence extracted from NCBI backbone (NCBIN:109895, NCBIP:109899)

Query Match 31.2%; Score 24; DB 2; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+03;  
 Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RQPG 7  
 ||||  
 DB 10 RQPG 13

RESULT 15  
 B60422  
 MSEL-neurophysin - African clawed frog (fragment)  
 N;Alternate names: vasopressin-associated neurophysin  
 C;Species: Xenopus laevis (African clawed frog)  
 C;Date: 12-Feb-1993 #sequence\_revision 12-Feb-1993 #text\_change 17-Mar-1999  
 C;Accession: B60422  
 R;Chauvet, J.; Michel, G.; Rouille, Y.; Chauvet, M.T.; Acher, R.  
 Neuropeptides 15, 123-127, 1990  
 A;Title: Identification of two types of neurophysins in Xenopus laevis neurointermediate  
 A;Reference number: A60422; MUID:91067001; PMID:2250763  
 A;Accession: B60422  
 A;Molecule type: protein  
 A;Residues: 1-24 <CHA>  
 C;Superfamily: oxytocin-neurophysin  
 C;Keywords: pituitary

Query Match 31.2%; Score 24; DB 2; Length 24;  
 Best Local Similarity 66.7%; Pred. No. 1.7e+03;  
 Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 IQRGPG 7  
 :|||  
 DB 11 MQXGPG 16

RESULT 16  
 D41575  
 bombinin-like peptide 4 - Bombina orientalis  
 C;Species: Bombina orientalis  
 C;Date: 30-Jun-1992 #sequence\_revision 30-Jun-1992 #text\_change 09-Jul-2004  
 C;Accession: D41575  
 R;Gibson, B.W.; Tang, D.; Mandrell, R.; Kelly, M.; Spindel, E.R.  
 J. Biol. Chem. 266, 23103-23111, 1991  
 A;Title: Bombinin-like peptides with antimicrobial activity from skin secretions of the  
 A;Reference number: A41575; MUID:92078177; PMID:1744108  
 A;Accession: D41575  
 A;Status: preliminary  
 A;Molecule type: protein  
 A;Residues: 1-25 <GIB>  
 A;Cross-references: UNIPROT:P29005  
 C;Superfamily: bombinin H precursor

Query Match 31.2%; Score 24; DB 2; Length 25;  
 Best Local Similarity 45.5%; Pred. No. 1.7e+03;  
 Matches 5; Conservative 2; Mismatches 4; Indels 0; Gaps 0;

QY 5 GPGRAFTWGK 15  
 ||||| :||

Db 1 GIGAAILSAGK 11

RESULT 17  
 PS0453  
 36K protein 3124 - rice (strain Nihonbare) (fragment)  
 C;Species: Oryza sativa (rice)  
 C;Date: 03-Feb-1994 #sequence\_revision 03-Feb-1994 #text\_change 23-Mar-1995  
 C;Accession: PS0453  
 R;Taugita, A.  
 submitted to JIPID, April 1993  
 A;Reference number: PS0206  
 A;Accession: PS0453  
 A;Molecule type: protein  
 A;Residues: 1-13 <TSU>  
 A;Experimental source: leaf, chlorophyll, stem  
 A;Note: molecular weight 36K, pI 6.1

Query Match 30.5%; Score 23.5; DB 2; Length 13;  
 Best Local Similarity 50.0%; Pred. No. 1.2e+03;  
 Matches 6; Conservative 1; Mismatches 4; Indels 1; Gaps 1;

QY 2 IQRGPGRAFTVI 13  
 ||||| :||  
 DB 3 IQXAPG-XFVAV 13

RESULT 18  
 S65388  
 cytochrome-c oxidase (EC 1.9.3.1) chain VII c, hepatic - rat (fragment)  
 C;Species: Rattus norvegicus (Norway rat)  
 C;Date: 28-Oct-1996 #sequence\_revision 13-Mar-1997 #text\_change 09-Jul-2004  
 C;Accession: S65388; S65389  
 R;Schaegger, H.; Noack, H.; Halangk, W.; Brandt, U.; von Jagow, G.  
 Eur. J. Biochem. 230, 235-241, 1995  
 A;Title: Cytochrome-c oxidase in developing rat heart. Enzymic properties and amino-termi  
 A;Reference number: S65372; MUID:95324529; PMID:7601105  
 A;Accession: S65388  
 A;Status: preliminary  
 A;Molecule type: protein  
 A;Residues: 1-10 <SCH>  
 A;Cross-references: UNIPROT:P80432  
 A;Accession: S65389  
 A;Status: preliminary  
 A;Molecule type: protein  
 A;Residues: 1-10 <SC2>  
 C;Superfamily: cytochrome-c oxidase chain VIIC  
 C;Keywords: oxidoreductase

Query Match 29.9%; Score 23; DB 2; Length 10;  
 Best Local Similarity 50.0%; Pred. No. 1.1e+03;  
 Matches 3; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 3 QRGPGR 8  
 :|||  
 DB 4 BEGPGK 9

RESULT 19  
 AF2093  
 heterocyst-inhibiting signaling peptide [imported] - Nostoc sp. (strain PCC 7120)  
 C;Species: Nostoc sp. PCC 7120  
 A;Note: Nostoc sp. strain PCC 7120 is a synonym of Anabaena sp. strain PCC 7120  
 C;Date: 14-Dec-2001 #sequence\_revision 14-Dec-2001 #text\_change 09-Jul-2004  
 C;Accession: AF2093  
 R;Kaneko, T.; Nakamura, Y.; Wolk, C.P.; Kuritz, T.; Sasamoto, S.; Watanabe, A.; Iriguchi, Nakazaki, N.; Shimpo, S.; Sugimoto, M.; Takazawa, M.; Yamada, M.; Yasuda, M.; Tabata, S.  
 DNA Res. 8, 205-213, 2001  
 A;Title: Complete Genomic Sequence of the Filamentous Nitrogen-fixing Cyanobacterium Anal  
 A;Reference number: AB1807; MUID:21595285; PMID:11759840  
 A;Accession: AF2093  
 A;Status: preliminary  
 A;Molecule type: DNA

A;Residues: 1-17 <UR>  
A;Cross-references: UNIPROT:O52748; GB:BA000019; PIDN:BAB74000.1; PID:g17131393; GSPDB:G  
A;Experimental source: strain PCC 7120  
C;Genetics:  
A;Gene: pats

Query Match 29.9%; Score 23; DB 2; Length 17;  
Best Local Similarity 66.7%; Pred. No. 1.8e+03;  
Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 3 ORGPGR 8  
Db 12 ERGGR 17

RESULT 20  
S77991  
cytochrome-c oxidase (EC 1.9.3.1) chain VIII.1 - bigeye tuna (fragment)  
C;Species: Thunnus obesus (bigeye tuna)  
C;Date: 17-Sep-1997 #sequence\_revision 17-Sep-1997 #text\_change 09-Jul-2004  
C;Accession: S77991  
R;Arnold, S.; Lee, J.; Kim, M.; Song, E.; Linder, D.; Lottepeich, F.; Kadenbach, B.  
submitted to the Protein Sequence Database, June 1997  
A;Reference number: S77980  
A;Accession: S77991  
A;Molecule type: protein  
A;Residues: 1-20 <ARN>  
A;Cross-references: UNIPROT:P80983  
A;Experimental source: heart; liver  
C;Genetics:  
A;Genome: nuclear  
C;Function:  
A;Pathway: oxidative phosphorylation; respiratory chain  
C;Keywords: electron transfer; membrane-associated complex; mitochondrial inner membrane

Query Match 29.9%; Score 23; DB 2; Length 20;  
Best Local Similarity 40.0%; Pred. No. 2.1e+03;  
Matches 4; Conservative 2; Mismatches 4; Indels 0; Gaps 0;

Qy 6 PGRAPVTIG 15  
Db 5 PAKXXVTAGE 14

RESULT 21  
S65629  
protoporphyrinogen oxidase (EC 1.3.3.4) - bovine (fragment)  
C;Species: Bos primigenius taurus (cattle)  
C;Date: 14-Feb-1997 #sequence\_revision 13-Mar-1997 #text\_change 26-May-2000  
C;Accession: S65629  
R;Taketani, S.; Yoshinaga, T.; Furukawa, T.; Kohno, H.; Tokunaga, R.; Nishimura, K.; Ino  
Eur. J. Biochem. 230, 760-765, 1995  
A;Title: Induction of terminal enzymes for heme biosynthesis during differentiation of m  
A;Reference number: S65629; MUID:953331315; PMID:7607249  
A;Accession: S65629  
A;Molecule type: protein  
A;Residues: 1-12 <TAK>  
C;Genetics:  
A;Genome: nuclear  
C;Function:  
A;Pathway: heme biosynthesis; porphyrin biosynthesis  
C;Superfamily: phytoene dehydrogenase  
C;Keywords: heme biosynthesis; mitochondrion; oxidoreductase; porphyrin biosynthesis

Query Match 28.6%; Score 22; DB 2; Length 12;  
Best Local Similarity 50.0%; Pred. No. 2e+03;  
Matches 4; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 7 GRAFVTIG 14  
Db 1 GRTVVVLG 8

RESULT 22  
S31220  
82K protein - bovine  
C;Species: Bos primigenius taurus (cattle)  
C;Date: 19-Mar-1997 #sequence\_revision 19-Mar-1997 #text\_change 09-Jul-2004  
C;Accession: S31220  
R;Castillo, G.W.; Templeton, D.M.  
FEBS Lett. 318, 292-296, 1993  
A;Title: Subunit structure of bovine ESF (extracellular-matrix stabilizing factor(s)). A  
A;Reference number: S31219; MUID:93178646; PMID:7680011  
A;Accession: S31220  
A;Status: preliminary  
A;Molecule type: protein  
A;Residues: 1-20 <CAS>  
A;Cross-references: UNIPROT:Q9TRI0

Query Match 28.6%; Score 22; DB 2; Length 20;  
Best Local Similarity 100.0%; Pred. No. 3.1e+03;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 6 PGRA 9  
Db 3 PGRA 6

RESULT 23  
DIRT  
dental fluid transport-stimulating peptide - rat  
N;Alternate names: DFT-stimulating peptide  
C;Species: Rattus norvegicus (Norway rat)  
C;Date: 20-Jun-2000 #sequence\_revision 20-Jun-2000 #text\_change 16-Aug-2004  
C;Accession: J00001  
R;Yamamoto, T.; Kobayashi, M.; Kobayashi, M.; Yamamoto, M.; Nomura, M.; Aonuma, S.  
Chem. Pharm. Bull. 34, 3803-3811, 1986  
A;Title: Isolation and amino acid sequence of dental fluid transport-stimulating pepti  
A;Reference number: J00001; MUID:87131231; PMID:3815601  
A;Accession: J00001  
A;Molecule type: protein  
A;Residues: 1-20 <YAM>  
A;Cross-references: UNIPROT:P07448  
A;Experimental source: parotid gland  
C;Comment: This peptide stimulates the transport of dental fluid, which is important f  
C;Keywords: hormone; parotid gland

Query Match 28.6%; Score 22; DB 2; Length 20;  
Best Local Similarity 55.6%; Pred. No. 3.1e+03;  
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 6 PGRAPVTIG 14  
Db 12 PGRKDSAG 20

RESULT 24  
A60225  
pyruvate dehydrogenase (lipoamide) (EC 1.2.4.1) alpha chain - bovine (fragment)  
C;Species: Bos primigenius taurus (cattle)  
C;Date: 21-Oct-1992 #sequence\_revision 21-Oct-1992 #text\_change 09-Jul-2004  
C;Accession: A60225  
R;Lawson, R.; Aitken, A.; Yeaman, S.J.  
Biochem. Soc. Trans. 11, 298-299, 1983  
A;Title: Primary sequence of the N-terminal region of the alpha-subunit of pyruvate dehy  
A;Reference number: A60225  
A;Accession: A60225  
A;Status: preliminary  
A;Molecule type: protein  
A;Residues: 1-21 <LAW>  
A;Cross-references: UNIPROT:Q9N1X8  
C;Superfamily: pyruvate dehydrogenase (lipoamide) alpha chain; thiamin pyrophosphate-bin  
C;Keywords: oxidoreductase

Query Match 28.6%; Score 22; DB 2; Length 21;  
Best Local Similarity 50.0%; Pred. No. 3.2e+03;

Matches 3; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQGP 6  
16 RLEGP 21

Db

RESULT 25  
PQ0070  
T-cell receptor beta chain (BTB15) - bovine (fragment)  
C:Species: Bos primigenius taurus (cattle)  
C:Date: 20-Feb-1995 #sequence\_revision 20-Feb-1995 #text\_change 20-Feb-1995  
C:Accession: PQ0070  
R;Tanaka, A.; Ishiguro, N.; Shinagawa, M.  
submitted to JIPID, May 1990  
A:Description: Sequence analysis of bovine T-cell receptor beta chain genes.  
A:Reference number: JQ0472  
A:Accession: PQ0070  
A:Molecule type: mRNA  
A:Residues: 1-22 <PAN>  
A:Experimental source: T cell  
C:Genetics:  
A:Gene: BTB15  
C:Keywords: receptor

Query Match 28.6%; Score 22; DB 2; Length 22;  
Best Local Similarity 33.3%; Pred. No. 3.4e+03;  
Matches 3; Conservative 2; Mismatches 4; Indels 0; Gaps 0;

Qy 5 GPGRAFVTI 13  
14 GPGTRLIVL 22

Db

RESULT 26  
S47192  
T-cell receptor J-alpha wVII.2 - human (fragment)  
C:Species: Homo sapiens (man)  
C:Date: 06-Feb-1995 #sequence\_revision 06-Feb-1995 #text\_change 23-Jul-1999  
C:Accession: S47192  
R;Plaza, A.; Kono, D.H.; Theofilopoulos, A.N.  
submitted to the EMBL Data Library, February 1993  
A:Reference number: S40133  
A:Accession: S47192  
A>Status: preliminary  
A:Molecule type: mRNA  
A:Residues: 1-23 <PLA>  
A:Cross-references: EMBL:X71051; PIDN:G506974; PIDN:G5A0368.1; PID:G510653  
C:Superfamily: immunoglobulin V region; immunoglobulin homology  
C:Keywords: T-cell receptor

Query Match 28.6%; Score 22; DB 2; Length 23;  
Best Local Similarity 45.5%; Pred. No. 3.5e+03;  
Matches 5; Conservative 1; Mismatches 5; Indels 0; Gaps 0;

Qy 4 RGPGRFVTIG 14  
4 RTGRRALTFG 14

Db

RESULT 27  
S22221  
peroxidase (EC 1.11.1.7) - imperfect fungus (Arthromyces ramosus) (fragment)  
C:Species: Arthromyces ramosus  
C:Date: 12-Feb-1998 #sequence\_revision 17-Apr-1998 #text\_change 12-Jul-2004  
C:Accession: S22221  
R;Kjalke, M.; Andersen, M.B.; Schneider, P.; Christensen, B.; Schuelein, M.; Welinder, K.  
Biochim. Biophys. Acta 1120, 248-256, 1992  
A:Title: Comparison of structure and activities of peroxidases from Coprinus cinereus,  
A:Reference number: S21746; MUID:92247803; PMID:1576150  
A:Accession: S22221  
A:Molecule type: protein  
A:Residues: 1-25 <KJA>

C:Superfamily: peroxidase  
C:Keywords: blocked amino end; glycoprotein; oxidoreductase

Query Match 28.6%; Score 22; DB 2; Length 25;  
Best Local Similarity 44.4%; Pred. No. 3.8e+03;  
Matches 4; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy 5 GPGRAFVTI 13  
14 GPGNTVTAI 22

Db

RESULT 28  
B44524  
pregnancy-specific glycoprotein SBU-3-62 - sheep (fragment)  
C:Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)  
C:Date: 30-Sep-1993 #sequence\_revision 30-Sep-1993 #text\_change 16-Aug-2004  
C:Accession: B44524  
R;Atkinson, Y.H.  
submitted to the Protein Sequence Database, June 1993  
A:Reference number: A44524  
A:Accession: B44524  
A>Status: preliminary  
A:Molecule type: protein  
A:Residues: 1-25 <ATK>  
A:Cross-references: UNIPROT:Q9TRE1  
C:Superfamily: Pepsin  
C:Keywords: glycoprotein

Query Match 28.6%; Score 22; DB 2; Length 25;  
Best Local Similarity 57.1%; Pred. No. 3.8e+03;  
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 8 RPFVTIG 14  
17 RGXITIG 23

Db

RESULT 29  
S10850  
alpha-amylase inhibitor - durum wheat (fragment)  
N:Alternate names: glutenin low molecular weight chain  
C:Species: Triticum durum (durum wheat)  
C:Date: 19-Mar-1997 #sequence\_revision 29-Aug-1997 #text\_change 09-Jul-2004  
C:Accession: S10850  
R;Kobrehel, K.; Alary, R.  
J. Sci. Food Agric. 48, 441-452, 1989  
A:Title: Isolation and partial characterisation of two low molecular weight durum wheat  
A:Reference number: S10849  
A:Accession: S10850  
A:Molecule type: protein  
A:Residues: 1-25 <KOB>  
A:Cross-references: UNIPROT:Q7M219  
C:Superfamily: wheat alpha-amylase inhibitor  
C:Keywords: alpha-amylase inhibitor

Query Match 28.6%; Score 22; DB 2; Length 25;  
Best Local Similarity 71.4%; Pred. No. 3.8e+03;  
Matches 5; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 6 PGRFVPT 12  
6 PGVAFPT 12

Db

RESULT 30  
S77990  
cytochrome-c oxidase (EC 1.9.3.1) chain VIIc - bigeye tuna (fragment)  
C:Species: Thunnus obesus (bigeye tuna)  
C:Date: 17-Sep-1997 #sequence\_revision 17-Sep-1997 #text\_change 09-Jul-2004  
C:Accession: S77990  
R;Arnold, S.; Lee, J.; Kim, M.; Song, E.; Linder, D.; Lottspeich, F.; Kadenbach, B.  
submitted to the Protein Sequence Database, June 1997

A;Reference number: S77980  
A;Accession: S77990  
A;Molecule type: protein  
A;Residues: 1-10 <ARN>  
A;Cross-references: UNIPROT:P80982  
A;Experimental source: heart; liver  
C;Genetics:  
A;Genome: nuclear  
C;Function:  
A;Pathway: oxidative phosphorylation; respiratory chain  
C;Keywords: electron transfer; membrane-associated complex; mitochondrial inner membrane

Query Match 27.3%; Score 21; DB 2; Length 10;  
Best Local Similarity 75.0%; Pred. No. 2.5e+03;  
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 5 GPKR 8  
| | | |  
Db 6 GPKK 9

RESULT 31  
S33800  
Chaperone, TCPI-related - oat  
C;Species: Avena sativa (oat)  
C;Date: 02-Dec-1993 #sequence\_revision 27-Feb-1997 #text\_change 09-Jul-2004  
C;Accession: S33800  
R;Mummert, E.; Grimm, R.; Speth, V.; Eckerskorn, C.; Schiltz, E.; Gatenby, A.A.; Schaefer  
Nature 363, 644-648, 1993  
A;Title: A TCPI-related molecular chaperone from plants refolds phytochrome to its photo  
A;Reference number: S33800; MUID:93288140; PMID:8099715  
A;Accession: S33800  
A;Status: preliminary  
A;Molecule type: protein  
A;Residues: 1-13 <MW>  
A;Cross-references: UNIPROT:Q7M1G8

Query Match 27.3%; Score 21; DB 2; Length 13;  
Best Local Similarity 50.0%; Pred. No. 3.1e+03;  
Matches 4; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 5 GPKRAFVT 12  
| | | | |  
Db 6 GPKGNPEMT 13

RESULT 32  
PH1347  
Ig heavy chain DJ region (clone C100-103A) - human (fragment)  
C;Species: Homo sapiens (man)  
C;Date: 30-Sep-1993 #sequence\_revision 30-Sep-1993 #text\_change 07-May-1999  
C;Accession: PH1347  
R;Wasserman, R.; Gallili, N.; Ito, Y.; Reichard, B.A.; Shane, S.; Rovera, G.  
J. Exp. Med. 176, 1577-1581, 1992  
A;Title: Predominance of fetal type DJH joining in young children with B precursor lymph  
A;Reference number: PH1302; MUID:93094761; PMID:1460419  
A;Accession: PH1347  
A;Molecule type: DNA  
A;Residues: 1-14 <WAS>  
C;Keywords: heterotetramer; immunoglobulin

Query Match 27.3%; Score 21; DB 2; Length 14;  
Best Local Similarity 50.0%; Pred. No. 3.3e+03;  
Matches 4; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 7 GRAFTTIG 14  
| | | | |  
Db 3 GEDFLTTG 10

RESULT 33  
H41299  
T-cell receptor alpha chain precursor J region (40) - human (fragment)

C;Species: Homo sapiens (man)  
C;Date: 28-May-1992 #sequence\_revision 28-May-1992 #text\_change 05-Nov-1999  
C;Accession: H41299  
R;Uematsu, Y.; Wege, H.; Straus, A.; Ott, M.; Bannwarth, W.; Lanchbury, J.; Panayi, G.; S  
Proc. Natl. Acad. Sci. U.S.A. 88, 8534-8538, 1991  
A;Title: The T-cell-receptor repertoire in the synovial fluid of a patient with rheumatoid  
A;Reference number: H41299; MUID:92020887; PMID:1656449  
A;Accession: H41299  
A;Status: preliminary  
A;Molecule type: mRNA  
A;Residues: 1-16 <UEN>  
A;Cross-references: GB:S57504; NID:9236332; PIDN:AAB19963.1; PID:9236333  
C;Keywords: T-cell receptor

Query Match 27.3%; Score 21; DB 2; Length 16;  
Best Local Similarity 44.4%; Pred. No. 3.8e+03;  
Matches 4; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

Qy 5 GPGRAFVTI 13  
| | | | |  
Db 7 GPGTSLSVI 15

RESULT 34  
A42411  
myosin light chain kinase - chicken  
C;Species: Gallus gallus (chicken)  
C;Date: 04-Mar-1993 #sequence\_revision 18-Nov-1994 #text\_change 09-Jul-2004  
C;Accession: A42411  
R;Leachman, S.A.; Gallagher, P.J.; Herring, B.P.; McPhaul, M.J.; Stull, J.T.  
J. Biol. Chem. 267, 4930-4938, 1992  
A;Title: Biochemical properties of chimeric skeletal and smooth muscle myosin light chain  
A;Reference number: A42411; MUID:92165861; PMID:1371510  
A;Accession: A42411  
A;Status: preliminary; not compared with conceptual translation  
A;Molecule type: nucleic acid; protein  
A;Residues: 1-16 <LEA>  
A;Cross-references: UNIPROT:Q7LZ16  
A;Experimental source: skeletal muscle  
A;Note: sequence extracted from NCBI backbone (NCBIP:84332)

Query Match 27.3%; Score 21; DB 2; Length 16;  
Best Local Similarity 62.5%; Pred. No. 3.8e+03;  
Matches 5; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 4 RGPGRFV 11  
| | | | |  
Db 1 RGPAPGV 8

RESULT 35  
I51879  
cystathionine beta-synthase - human (fragment)  
C;Species: Homo sapiens (man)  
C;Date: 02-Jul-1996 #sequence\_revision 02-Jul-1996 #text\_change 09-Jul-2004  
C;Accession: I51879  
R;Sebastiao, G.; Sperandio, M.P.; Panico, M.; de Franchis, R.; Kraus, J.P.; Andria, G.  
Am. J. Hum. Genet. 56, 1324-1333, 1995  
A;Title: The molecular basis of homocystinuria due to cystathionine beta-synthase deficie  
A;Reference number: I51879; MUID:95282779; PMID:7762555  
A;Accession: I51879  
A;Status: preliminary; translated from GB/EMBL/DBD  
A;Molecule type: DNA  
A;Residues: 1-16 <RES>  
A;Cross-references: UNIPROT:Q16350; GB:S78267; NID:9999349; PIDN:AAB34404.1; PID:9999350

Query Match 27.3%; Score 21; DB 2; Length 16;  
Best Local Similarity 80.0%; Pred. No. 3.8e+03;  
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 6 PGRAF 10  
| | | | |  
Db 7 PGGAF 11

```

RESULT 36
S09722
2S albumin small chain 1 nIV - rape (fragments)
C:Species: Brassica napus (rape)
C:Date: 19-Mar-1997 #sequence_revision 13-Mar-1998 #text_change 13-Mar-1998
C:Accession: S09722
R:Monsalve, R.I.; Menendez-Arias, L.; Lopez-Otin, C.; Rodriguez, R.
FEBS Lett. 263, 209-212, 1990
A:Title: beta-Turns as structural motifs for the proteolytic processing of seed proteins
A:Reference number: S09720; MUID:90242974; PMID:2185951
A:Accession: S09722
A:Molecule type: protein
A:Residues: 1-9,10-18 <MON>
A:Experimental source: seed

Query Match      27.3%; Score 21; DB 2; Length 18;
Best Local Similarity 57.1%; Pred. No. 4.2e+03;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 RIQKPGP 7
Db 6 RIQKPG 12

RESULT 37
I49037
TCR delta chain V-D-J region - mouse (fragment)
C:Species: Mus musculus (house mouse)
C:Date: 21-Jan-1994 #sequence_revision 18-Nov-1994 #text_change 05-Nov-1999
C:Accession: I49037
R:Rezquerria, A.; Wilde, D.B.; McConnell, T.J.; Sturmhofel, K.; Valas, R.B.; Shevach, E.M.
Eur. J. Immunol. 22, 491-498, 1992
A:Title: Mouse autoreactive gamma/delta T cells. II. Molecular characterization of the T
A:Reference number: A49037; MUID:92164730; PMID:1311262
A:Accession: I49037
A>Status: Preliminary
A:Molecule type: DNA
A:Residues: 1-19 <EZQ>
A:Cross-references: GB:S90660; NID:g246304; PIDN:AA821555.1; PID:g246305
A:Experimental source: dendritic epidermal T-cell lines
A:Note: sequence extracted from NCBI backbone (NCBIN:90660, NCBIP:90671)

Query Match      27.3%; Score 21; DB 2; Length 19;
Best Local Similarity 50.0%; Pred. No. 4.4e+03;
Matches 5; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 5 GPGRAFVTIG 14
Db 2 GGGRIWRLIG 11

RESULT 38
A39269
LX-1 tumor antigen - human (fragment)
C:Species: Homo sapiens (man)
C:Date: 18-Oct-1991 #sequence_revision 18-Oct-1991 #text_change 05-Jan-1996
C:Accession: A39269
R:Rosenbaum, L.C.; Neuwelt, E.A.; Van Tol, H.H.M.; Loh, Y.P.; Verbalis, J.G.; Hellstrom
Proc. Natl. Acad. Sci. U.S.A. 87, 9928-9932, 1990
A:Title: Expression of neurophysin-related precursor in cell membranes of a small-cell
A:Reference number: A39269; MUID:91088624; PMID:1702222
A:Accession: A39269
A:Molecule type: protein
A:Residues: 1-22 <ROS>
C:Superfamily: oxytocin-neurophysin

Query Match      27.3%; Score 21; DB 2; Length 22;
Best Local Similarity 66.7%; Pred. No. 5e+03;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GPGRAF 10

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Db 17 GKGRRF 22

# RESULT 39

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T01780
probable gag polymerase pseudogene - human (fragment)
C:Species: Homo sapiens (man)
C:Date: 13-Aug-1999 #sequence_revision 13-Aug-1999 #text_change 20-Oct-2000
C:Accession: T01780
R:Repaske, R.; O'Neill, R.R.; Steele, P.E.; Martin, M.A.
Proc. Natl. Acad. Sci. U.S.A. 80, 678-682, 1983
A:Title: Characterization and partial nucleotide sequence of endogenous type C retrovirus
A:Reference number: Z14423; MUID:83143994; PMID:6298769
A:Accession: T01780
A>Status: translated from GB/EMBL/DDBJ; conceptual translation of pseudogene
A:Molecule type: DNA
A:Residues: 1-24 <REP>
A:Cross-references: EMBL:J00274; NID:g182154
C:Keywords: pseudogene

Query Match      27.3%; Score 21; DB 4; Length 24;
Best Local Similarity 33.3%; Pred. No. 5.4e+03;
Matches 5; Conservative 3; Mismatches 7; Indels 0; Gaps 0;

QY 1 RIQPGGAFVTIG 15
Db 6 RRPRQGGGALLNLAE 20

RESULT 40
A25941
Ig heavy chain J-H1 region - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C:Date: 05-Jun-1998 #sequence_revision 05-Jun-1988 #text_change 23-Jul-1999
C:Accession: A25941; JH0666
R:Brueggemann, M.; Free, J.; Diamond, A.; Howard, J.; Cobbold, S.; Waldmann, H.
Proc. Natl. Acad. Sci. U.S.A. 83, 6075-6079, 1986
A:Title: Immunoglobulin heavy chain locus of the rat: striking homology to mouse antibody
A:Reference number: A25941; MUID:86287397; PMID:3016742
A:Accession: A25941
A:Molecule type: DNA
A:Residues: 1-18 <BRU>
A:Cross-references: GB:M13798; NID:g204707; PIDN:AAA41371.1; PID:g554447
R:Lang, P.; Mocikat, R.
Gene 102, 261-264, 1991
A:Title: Immunoglobulin heavy-chain joining genes in the rat: comparison with mouse and
A:Reference number: JH0666; MUID:91340162; PMID:1908401
A:Accession: JH0666
A:Molecule type: DNA
A:Residues: 1-18 <LAN>
A:Cross-references: EMBL:X56791
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin

Query Match      26.6%; Score 20.5; DB 2; Length 18;
Best Local Similarity 55.6%; Pred. No. 5.1e+03;
Matches 5; Conservative 1; Mismatches 2; Indels 1; Gaps 1;

QY 5 GPGRAFVTI 13
Db 9 GPG-TWTV 16

RESULT 41
S13279
Ile-Ser-bradykinin - human (fragment)
N:Alternate names: T-kinin
C:Species: Homo sapiens (man)
C:Date: 02-Dec-1993 #sequence_revision 13-Mar-1997 #text_change 09-Jul-2004
C:Accession: S13279
R:Wunderer, G.; Walter, I.; Eschenbacher, B.; Lang, M.; Kellermann, J.; Kindermann, G.
Biol. Chem. Hoppe-Seyler 371, 977-981, 1990

```



A;Title: Ile-Ser-bradykinin is an aberrant permeability factor in various human malignan  
A;Reference number: S13279; MUID:91166748; PMID:2076202  
A;Accession: S13279  
A;Molecule type: protein  
A;Residues: 1-11 <WUN>  
A;Cross-references: UNIPROT:Q7MAP1  
C;Keywords: bradykinin

Query Match 26.0%; Score 20; DB 2; Length 11;  
Best Local Similarity 66.7%; Pred. No. 4e+03;  
Matches 4; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2 IQRPG 7  
| | | |  
Db 1 ISRPPG 6

RESULT 42  
S43634  
cytochrome-c oxidase (EC 1.9.3.1) chain VIIc, cardiac - rainbow trout (fragment)  
C;Species: Oncorhynchus mykiss (rainbow trout)  
C;Date: 20-Oct-1994 #sequence\_revision 01-Nov-1996 #text\_change 16-Jul-1999  
C;Accession: S43634  
R;Freund, R.; Kadenbach, B.  
Eur. J. Biochem. 221, 1111-1116, 1994  
A;Title: Identification of tissue-specific isoforms for subunits Vb and VIIa of cytochr  
A;Reference number: S43624; MUID:94237150; PMID:8181469  
A;Accession: S43634  
A;Molecule type: protein  
A;Residues: 1-15 <FRE>  
A;Note: the source is designated as Salmo gairdneri  
C;Genetics:  
A;Genome: nuclear  
C;Keywords: cardiac muscle; heart; membrane-associated complex; mitochondrion; oxidoredu

Query Match 26.0%; Score 20; DB 2; Length 15;  
Best Local Similarity 75.0%; Pred. No. 5.3e+03;  
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 5 GPGR 8  
| | | |  
Db 6 GPGQ 9

RESULT 43  
D28587  
T-cell receptor beta-2 chain J-B2.5 segment - human (fragment)  
C;Species: Homo sapiens (man)  
C;Date: 16-Aug-1988 #sequence\_revision 16-Aug-1988 #text\_change 05-Nov-1999  
C;Accession: D28587  
R;Toyonaga, B.; Yoshikai, Y.; Vadasz, V.; Chin, B.; Mak, T.W.  
Proc. Natl. Acad. Sci. U.S.A. 82, 8624-8628, 1985  
A;Title: Organization and sequences of the diversity, joining, and constant region genes  
A;Reference number: A94081; MUID:86094276; PMID:3866244  
A;Accession: D28587  
A;Molecule type: DNA  
A;Residues: 1-15 <TOV>  
A;Cross-references: GB:M14159; NID:g338852; PIDN:AAA60679.1; PID:g553690  
C;Keywords: T-cell receptor

Query Match 26.0%; Score 20; DB 2; Length 15;  
Best Local Similarity 33.3%; Pred. No. 5.3e+03;  
Matches 3; Conservative 2; Mismatches 4; Indels 0; Gaps 0;

Qy 5 GPGRAFVTI 13  
| | | |  
Db 7 GPGTRLLVL 15

RESULT 44  
C34874  
transforming protein (N-rasB) - rat (fragment)  
C;Species: Rattus norvegicus (Norway rat)

A;Title: 20-Jul-1990 #sequence\_revision 20-Jul-1990 #text\_change 09-Jul-2004  
A;Accession: C34874  
R;McMahon, G.; Davis, E.F.; Huber, L.J.; Kim, Y.; Wogan, G.N.  
Proc. Natl. Acad. Sci. U.S.A. 87, 1104-1108, 1990  
A;Title: Characterization of c-Ki-ras and N-ras oncogenes in aflatoxin B-1-induced rat l  
A;Reference number: A34874; MUID:90138946; PMID:2105496  
A;Accession: C34874  
A;Status: preliminary  
A;Molecule type: protein  
A;Residues: 1-15 <MCM>  
A;Cross-references: UNIPROT:Q7M030

Query Match 26.0%; Score 20; DB 2; Length 15;  
Best Local Similarity 44.4%; Pred. No. 5.3e+03;  
Matches 4; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

Qy 5 GPGRAFVTI 13  
| | | |  
Db 6 GIGKSAULTI 14

RESULT 45  
PH1790  
T cell receptor alpha chain V region (clone 2PBL V alpha 24-6) - human (fragment)  
C;Species: Homo sapiens (man)  
C;Date: 16-Jul-1999 #sequence\_revision 16-Jul-1999 #text\_change 16-Jul-1999  
C;Accession: PH1790  
R;Porcellini, S.; Yockey, C.E.; Brenner, M.B.; Balk, S.P.  
J. Exp. Med. 178, 1-16, 1993  
A;Title: Analysis of T cell antigen receptor (TCR) expression by human peripheral blood c  
A;Reference number: PH1754; MUID:93301585; PMID:8391057  
A;Accession: PH1790  
A;Status: preliminary  
A;Molecule type: mRNA  
A;Residues: 1-16 <POR>

Query Match 26.0%; Score 20; DB 2; Length 16;  
Best Local Similarity 75.0%; Pred. No. 5.6e+03;  
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 3 QRGP 6  
| | | |  
Db 5 ERGP 8

Search completed: May 16, 2005, 13:07:12  
Job time : 21.0769 secs

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OM protein - protein search, using sw model

Run on: May 16, 2005, 12:57:08 ; Search time 113.231 Seconds  
(without alignments)  
70.804 Million cell updates/sec

Title: US-08-869-386-3

Perfect score: 123.11111111111111  
Sequence: 1 NWNHSEKQKPGKFAVTICKIG 24

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1432185 seqs, 334051727 residues

Total number of hits satisfying chosen parameters: 325800

Minimum DB seq length: 0  
Maximum DB seq length: 25

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Published Applications AA:\*  
1: /cgn2\_6/ptodata/1/pubpaa/US07\_PUBCOMB.pep.\*  
2: /cgn2\_6/ptodata/1/pubpaa/PCT\_NEW\_PUB.pep.\*  
3: /cgn2\_6/ptodata/1/pubpaa/US06\_NEW\_PUB.pep.\*  
4: /cgn2\_6/ptodata/1/pubpaa/US06\_PUBCOMB.pep.\*  
5: /cgn2\_6/ptodata/1/pubpaa/US07\_NEW\_PUB.pep.\*  
6: /cgn2\_6/ptodata/1/pubpaa/PCTUS\_PUBCOMB.pep.\*  
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12: /cgn2\_6/ptodata/1/pubpaa/US09\_NEW\_PUB.pep.\*  
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14: /cgn2\_6/ptodata/1/pubpaa/US10B\_PUBCOMB.pep.\*  
15: /cgn2\_6/ptodata/1/pubpaa/US10C\_PUBCOMB.pep.\*  
16: /cgn2\_6/ptodata/1/pubpaa/US10D\_PUBCOMB.pep.\*  
17: /cgn2\_6/ptodata/1/pubpaa/US10\_NEW\_PUB.pep.\*  
18: /cgn2\_6/ptodata/1/pubpaa/US11\_NEW\_PUB.pep.\*  
19: /cgn2\_6/ptodata/1/pubpaa/US60\_NEW\_PUB.pep.\*  
20: /cgn2\_6/ptodata/1/pubpaa/US60\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Match | Length | ID | Description       |
|------------|-------|-------|--------|----|-------------------|
| 1          | 115   | 93.5  | 24     | 17 | US-10-621-675-160 |
| 2          | 94    | 76.4  | 21     | 14 | US-10-178-488-25  |
| 3          | 92    | 74.8  | 20     | 9  | US-09-813-659-3   |
| 4          | 92    | 74.8  | 20     | 15 | US-10-283-610A-3  |
| 5          | 90    | 73.2  | 20     | 10 | US-09-827-345-24  |
| 6          | 88    | 71.5  | 20     | 14 | US-10-311-111-1   |
| 7          | 88    | 71.5  | 20     | 16 | US-10-398-932-1   |
| 8          | 82    | 66.7  | 18     | 14 | US-10-062-710-45  |
| 9          | 77    | 62.6  | 15     | 9  | US-09-810-310-15  |
| 10         | 77    | 62.6  | 15     | 9  | US-09-810-310-24  |
| 11         | 77    | 62.6  | 15     | 9  | US-09-589-621-8   |
| 12         | 77    | 62.6  | 15     | 10 | US-09-827-688-9   |
| 13         | 77    | 62.6  | 15     | 10 | US-09-077-439A-3  |

|    |      |      |    |    |                    |                    |
|----|------|------|----|----|--------------------|--------------------|
| 14 | 77   | 62.6 | 15 | 14 | US-10-133-210-246  | Sequence 245, App  |
| 15 | 77   | 62.6 | 15 | 14 | US-10-133-210-262  | Sequence 262, App  |
| 16 | 77   | 62.6 | 15 | 14 | US-10-147-910-6    | Sequence 6, Appli  |
| 17 | 77   | 62.6 | 15 | 17 | US-10-787-880-2    | Sequence 2, Appli  |
| 18 | 77   | 62.6 | 16 | 14 | US-10-062-710-44   | Sequence 44, Appli |
| 19 | 72   | 58.5 | 15 | 14 | US-10-239-313A-186 | Sequence 186, App  |
| 20 | 69   | 56.1 | 22 | 15 | US-10-373-592-113  | Sequence 113, App  |
| 21 | 69   | 56.1 | 23 | 17 | US-10-621-675-154  | Sequence 154, App  |
| 22 | 68   | 55.3 | 13 | 14 | US-10-239-313A-536 | Sequence 536, App  |
| 23 | 68   | 55.3 | 15 | 17 | US-10-622-003-6    | Sequence 6, Appli  |
| 24 | 67   | 54.5 | 23 | 17 | US-10-621-675-155  | Sequence 155, App  |
| 25 | 66   | 53.7 | 15 | 10 | US-09-993-307-21   | Sequence 21, Appli |
| 26 | 64   | 52.0 | 22 | 15 | US-10-373-592-112  | Sequence 112, App  |
| 27 | 64   | 52.0 | 22 | 15 | US-10-373-592-114  | Sequence 114, App  |
| 28 | 64   | 52.0 | 24 | 17 | US-10-628-004-12   | Sequence 12, Appli |
| 29 | 63   | 51.2 | 12 | 14 | US-10-239-313A-535 | Sequence 535, App  |
| 30 | 61   | 49.6 | 24 | 17 | US-10-621-675-7    | Sequence 7, Appli  |
| 31 | 60.5 | 49.2 | 24 | 17 | US-10-621-675-9    | Sequence 9, Appli  |
| 32 | 59   | 48.0 | 13 | 10 | US-09-956-940-15   | Sequence 15, Appli |
| 33 | 59   | 48.0 | 15 | 10 | US-09-956-940-50   | Sequence 50, Appli |
| 34 | 59   | 48.0 | 17 | 15 | US-10-360-647A-1   | Sequence 1, Appli  |
| 35 | 59   | 48.0 | 17 | 15 | US-10-613-018-1    | Sequence 1, Appli  |
| 36 | 59   | 48.0 | 21 | 17 | US-10-613-018-22   | Sequence 22, Appli |
| 37 | 59   | 48.0 | 21 | 17 | US-10-613-018-40   | Sequence 40, Appli |
| 38 | 58   | 47.2 | 13 | 14 | US-10-311-111-3    | Sequence 3, Appli  |
| 39 | 58   | 47.2 | 13 | 16 | US-10-398-932-3    | Sequence 3, Appli  |
| 40 | 58   | 47.2 | 15 | 9  | US-09-901-106-10   | Sequence 10, Appli |
| 41 | 58   | 47.2 | 23 | 17 | US-10-621-675-158  | Sequence 158, App  |
| 42 | 58   | 47.2 | 25 | 17 | US-10-621-675-12   | Sequence 12, Appli |
| 43 | 57   | 46.3 | 11 | 14 | US-10-239-313A-533 | Sequence 533, App  |
| 44 | 57   | 46.3 | 17 | 9  | US-09-901-106-12   | Sequence 12, Appli |
| 45 | 57   | 46.3 | 19 | 14 | US-10-178-488-24   | Sequence 24, Appli |

ALIGNMENTS

RESULT 1  
US-10-621-675-160  
; Sequence 160, Application US/10621675  
; Publication No. US20050049398A1  
; GENERAL INFORMATION:  
; APPLICANT: De Leys, Robert  
; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN  
; TITLE OF INVENTION: A PROCESS FOR DETERMINATION OF ANTIBODIES OF  
; TITLE OF INVENTION: BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT  
; TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS  
; TITLE OF INVENTION: CONTAINING THEM  
; FILE REFERENCE: 2752-11  
; CURRENT APPLICATION NUMBER: US/10/621,675  
; CURRENT FILING DATE: 2003-07-18  
; PRIOR APPLICATION NUMBER: US/09/576,824A  
; PRIOR APPLICATION NUMBER: 08/723,425  
; PRIOR FILING DATE: 1996-09-30  
; PRIOR APPLICATION NUMBER: 09/146,028  
; PRIOR FILING DATE: 1993-11-22  
; PRIOR APPLICATION NUMBER: PCT/EP93/00517  
; PRIOR FILING DATE: 1993-03-08  
; PRIOR APPLICATION NUMBER: EP 92400598.6  
; PRIOR FILING DATE: 1992-03-06  
; NUMBER OF SEQ ID NOS: 600  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 160  
; LENGTH: 24  
; TYPE: PRT  
; ORGANISM: Human immunodeficiency virus  
US-10-621-675-160

Query Match 93.5%; Score 115; DB 17; Length 24;  
Best Local Similarity 95.8%; Pred. No. 3e+10; Indels 0; Gaps 0;  
Matches 23; Conservative 0; Mismatches 1;

2.

```
; PRIOR APPLICATION NUMBER: PR 95/07914
; PRIOR FILING DATE: 1995-06-30
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 24
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: peptide
US-09-827-345-24

Query Match      73.2%; Score 90; DB 10; Length 20;
Best Local Similarity 94.7%; Pred. No. 1.5e-06;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 NNTRKSERIORGPGRAFTV 19
    ||||| ||||| ||||| |||||
Db 2 NNTRKSIRIORGPGRAFTV 20
    ||||| ||||| ||||| |||||

RESULT 6
US-10-311-111-1
; Sequence 1, Application US/10311111
; Publication No. US20030121065A1
; GENERAL INFORMATION:
; APPLICANT: SHIBA, KIYOTAKA
; TITLE OF INVENTION: MULTIFUNCTIONAL BASE SEQUENCE AND ARTIFICIAL GENE CONTAINING THE
; FILE REFERENCE: 4439-4004
; CURRENT APPLICATION NUMBER: US/10/311,111
; CURRENT FILING DATE: 2002-12-13
; PRIOR APPLICATION NUMBER: JP 2000-180997
; PRIOR FILING DATE: 2000-06-16
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 20
; TYPE: PRT
; ORGANISM: artificial
; FEATURE:
; OTHER INFORMATION: Designed peptide
US-10-311-111-1

Query Match      71.5%; Score 88; DB 14; Length 20;
Best Local Similarity 90.0%; Pred. No. 3e-06;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4 RKSERIORGPGRAFTVIGKI 23
    ||||| ||||| ||||| |||||
Db 1 RKSIRIORGPGRTFTVIGKI 20
    ||||| ||||| ||||| |||||

RESULT 7
US-10-398-932-1
; Sequence 1, Application US/10398932
; Publication No. US20040171803A1
; GENERAL INFORMATION:
; APPLICANT: SHIBA, KIYOTAKA
; APPLICANT: OHNO, TSUNESYA
; TITLE OF INVENTION: ARTIFICIAL PROTEINS WITH ENRICHED IMMUNOGEN
; TITLE OF INVENTION: OF EPITOPE
; FILE REFERENCE: 024918-0103
; CURRENT APPLICATION NUMBER: US/10/398,932
; CURRENT FILING DATE: 2003-04-11
; PRIOR APPLICATION NUMBER: PCT/JP01/08893
; PRIOR FILING DATE: 2001-10-10
; PRIOR APPLICATION NUMBER: JP 2000/314288
; PRIOR FILING DATE: 2000-10-13
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: HIV PEPTIDE

; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetically Designed
; OTHER INFORMATION: Peptide
US-10-398-932-1

Query Match      71.5%; Score 88; DB 16; Length 20;
Best Local Similarity 90.0%; Pred. No. 3e-06;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4 RKSERIORGPGRAFTVIGKI 23
    ||||| ||||| ||||| |||||
Db 1 RKSIRIORGPGRTFTVIGKI 20
    ||||| ||||| ||||| |||||

RESULT 8
US-10-062-710-45
; Sequence 45, Application US/10062710
; Publication No. US20030049253A1
; GENERAL INFORMATION:
; APPLICANT: Li, Frank Q.
; APPLICANT: Chu, Yong-Liang
; APPLICANT: Qiu, Jian-Tai
; TITLE OF INVENTION: Polymeric Conjugates for Delivery of
; TITLE OF INVENTION: MHC-Recognized Epitopes
; TITLE OF INVENTION: Via Peptide Vaccines
; FILE REFERENCE: 3781-001-27
; CURRENT APPLICATION NUMBER: US/10/062,710
; CURRENT FILING DATE: 2002-02-05
; PRIOR APPLICATION NUMBER: US 60/310,498
; PRIOR FILING DATE: 2001-08-08
; NUMBER OF SEQ ID NOS: 232
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 45
; LENGTH: 18
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: HIV Helper-T Cell Epitopes
US-10-062-710-45

Query Match      66.7%; Score 82; DB 14; Length 18;
Best Local Similarity 100.0%; Pred. No. 2.1e-05;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 9 IORGPGRAFTVIGKIG 24
    ||||| ||||| ||||| |||||
Db 2 IORGPGRAFTVIGKIG 17
    ||||| ||||| ||||| |||||

RESULT 9
US-09-810-310-15
; Sequence 15, Application US/09810310
; Patent No. US20020044948A1
; GENERAL INFORMATION:
; APPLICANT: Berzofsky, Jay A.
; APPLICANT: Khleif, Samir N.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR CO-STIMULATION OF
; TITLE OF INVENTION: IMMUNOLOGICAL RESPONSES TO PEPTIDE ANTIGENS
; FILE REFERENCE: 15280-415100US
; CURRENT APPLICATION NUMBER: US/09/810,310
; CURRENT FILING DATE: 2001-03-14
; PRIOR APPLICATION NUMBER: 60/189,396
; PRIOR FILING DATE: 2000-03-15
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: HIV PEPTIDE
```

OTHER INFORMATION: ANTIGEN  
US-09-810-310-15

Query Match 62.6%; Score 77; DB 9; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.0001;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 8 RIQGPGRFAFTVIGK 22  
| | | | | | | | | | | | | | | |  
DB 1 RIQGPGRFAFTVIGK 15

RESULT 10  
US-09-810-310-24  
; Sequence 24, Application US/09810310  
; Patent No. US20020044948A1  
; GENERAL INFORMATION:  
; APPLICANT: Kneif, Samir N.  
; APPLICANT: Berzofsky, Jay A.  
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR CO-STIMULATION OF  
; FILE OF INVENTION: IMMUNOLOGICAL RESPONSES TO PEPTIDE ANTIGENS  
; FILE REFERENCE: 15280-415100US  
; CURRENT APPLICATION NUMBER: US/09/810,310  
; CURRENT FILING DATE: 2001-03-14  
; PRIOR APPLICATION NUMBER: 60/189,396  
; PRIOR FILING DATE: 2000-03-15  
; NUMBER OF SEQ ID NOS: 61  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 24  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: HIV PEPTIDE  
; OTHER INFORMATION: ANTIGEN  
US-09-810-310-24

Query Match 62.6%; Score 77; DB 9; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.0001;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 8 RIQGPGRFAFTVIGK 22  
| | | | | | | | | | | | | | | |  
DB 1 RIQGPGRFAFTVIGK 15

RESULT 11  
US-09-989-621-8  
; Sequence 8, Application US/0989621  
; Patent No. US20020151683A1  
; GENERAL INFORMATION:  
; APPLICANT: Mogam Biotechnology Research Institute  
; APPLICANT: Kim, Tae-Youn  
; APPLICANT: Lee, Ki-Young  
; APPLICANT: Chang, Jin-Soo  
; APPLICANT: Cho, Sung-Yoo  
; APPLICANT: Hwang, Yu-Kyeong  
; APPLICANT: Choi, Myeong  
; APPLICANT: Cheong, Hong-Seok  
; TITLE OF INVENTION: Liposomes Comprising Peptide Antigens  
; FILE OF INVENTION: Derived from X Protein of Hepatitis B virus  
; FILE REFERENCE: 0136/08154  
; CURRENT APPLICATION NUMBER: US/09/989,621  
; CURRENT FILING DATE: 2001-11-20  
; PRIOR APPLICATION NUMBER: 09/051,006  
; PRIOR FILING DATE: 2000-11-17  
; NUMBER OF SEQ ID NOS: 10  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 8  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: HIV  
US-09-989-621-8

Query Match 62.6%; Score 77; DB 9; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.0001;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 8 RIQGPGRFAFTVIGK 22  
| | | | | | | | | | | | | | | |  
DB 1 RIQGPGRFAFTVIGK 15

RESULT 12  
US-09-827-688-9  
; Sequence 9, Application US/09827688  
; Publication No. US20030165476A1  
; GENERAL INFORMATION:  
; APPLICANT: ORSON, FRANK  
; APPLICANT: KINSEY, BERMA  
; APPLICANT: BHOGAL, BALBIR  
; TITLE OF INVENTION: MACROAGGREGATED PROTEIN CONJUGATES AS ORAL GENETIC IMMUNIZATION DI  
; FILE OF INVENTION: AGENTS  
; FILE REFERENCE: P01949US1/10004014  
; CURRENT APPLICATION NUMBER: US/09/827,688  
; CURRENT FILING DATE: 2001-04-06  
; PRIOR APPLICATION NUMBER: 60/195,680  
; PRIOR FILING DATE: 2000-04-07  
; NUMBER OF SEQ ID NOS: 13  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 9  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: HIV p18  
US-09-827-688-9

Query Match 62.6%; Score 77; DB 10; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.0001;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 8 RIQGPGRFAFTVIGK 22  
| | | | | | | | | | | | | | | |  
DB 1 RIQGPGRFAFTVIGK 15

RESULT 13  
US-09-077-439A-3  
; Sequence 3, Application US/09077439A  
; Publication No. US20030202989A1  
; GENERAL INFORMATION:  
; APPLICANT: Collier, R. John  
; APPLICANT: Blanke, Steven R.  
; APPLICANT: Milne, Jill C.  
; APPLICANT: Benson, Ericka L.  
; APPLICANT: Ballard, Jimmy D.  
; APPLICANT: Starnbach, Michael N.  
; TITLE OF INVENTION: Use of Toxin Peptides and/or Affinity  
; FILE OF INVENTION: Handles for Delivering Compounds into Cells  
; FILE REFERENCE: 00246/187002  
; CURRENT APPLICATION NUMBER: US/09/077,439A  
; CURRENT FILING DATE: 1999-04-08  
; PRIOR APPLICATION NUMBER: PCT/US96/20463  
; PRIOR FILING DATE: 1996-12-13  
; PRIOR APPLICATION NUMBER: US 60/019,275  
; PRIOR FILING DATE: 1996-06-07  
; PRIOR APPLICATION NUMBER: US 60/008,518  
; PRIOR FILING DATE: 1995-12-13  
; NUMBER OF SEQ ID NOS: 26  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 3  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: Homo sapien  
US-09-077-439A-3

Query Match 62.6%; Score 77; DB 10; Length 15;

Best Local Similarity 100.0%; Pred. No. 0.0001;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 8 RIQGPGRFVTVIGK 22  
DB 1 RIQGPGRFVTVIGK 15

RESULT 14

US-10-133-210-246  
; Sequence 246, Application US/10133210  
; Publication No. US20030103964A1  
; GENERAL INFORMATION:  
; APPLICANT: Delisi, Charles  
; APPLICANT: Berzofsky, Jay  
; APPLICANT: Gulukota, Kamalakara  
; APPLICANT: Vaccaro, Dennis  
; APPLICANT: Weng, Zhiping  
; APPLICANT: Zhang, Chao  
; TITLE OF INVENTION: METHODS FOR DESIGNING MOLECULAR CONJUGATES AND  
; FILE REFERENCE: BU-035AX  
; CURRENT APPLICATION NUMBER: US/10/133,210  
; CURRENT FILING DATE: 2002-04-26  
; NUMBER OF SEQ ID NOS: 281  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 246  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
US-10-133-210-246

Query Match 62.6%; Score 77; DB 14; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.0001;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 8 RIQGPGRFVTVIGK 22  
DB 1 RIQGPGRFVTVIGK 15

RESULT 15

US-10-133-210-262  
; Sequence 262, Application US/10133210  
; Publication No. US20030103964A1  
; GENERAL INFORMATION:  
; APPLICANT: Delisi, Charles  
; APPLICANT: Berzofsky, Jay  
; APPLICANT: Gulukota, Kamalakara  
; APPLICANT: Vaccaro, Dennis  
; APPLICANT: Weng, Zhiping  
; APPLICANT: Zhang, Chao  
; TITLE OF INVENTION: METHODS FOR DESIGNING MOLECULAR CONJUGATES AND  
; FILE REFERENCE: BU-035AX  
; CURRENT APPLICATION NUMBER: US/10/133,210  
; CURRENT FILING DATE: 2002-04-26  
; NUMBER OF SEQ ID NOS: 281  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 262  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
US-10-133-210-262

Query Match 62.6%; Score 77; DB 14; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.0001;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 8 RIQGPGRFVTVIGK 22  
DB 1 RIQGPGRFVTVIGK 15

RESULT 16

US-10-147-910-6  
; Sequence 6, Application US/10147910  
; Publication No. US20030124718A1  
; GENERAL INFORMATION:  
; APPLICANT: Fuller, Deborah  
; APPLICANT: Haynes, Joel  
; APPLICANT: Shipley, Timothy  
; TITLE OF INVENTION: Vaccine Composition  
; FILE REFERENCE: 033267-006  
; CURRENT APPLICATION NUMBER: US/10/147,910  
; CURRENT FILING DATE: 2002-05-20  
; PRIOR APPLICATION NUMBER: US 60/291,654  
; PRIOR FILING DATE: 2001-05-18  
; PRIOR APPLICATION NUMBER: US 60/291,655  
; PRIOR FILING DATE: 2001-05-18  
; NUMBER OF SEQ ID NOS: 53  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 6  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: HIV  
US-10-147-910-6

Query Match 62.6%; Score 77; DB 14; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.0001;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 8 RIQGPGRFVTVIGK 22  
DB 1 RIQGPGRFVTVIGK 15

RESULT 17

US-10-787-880-2  
; Sequence 2, Application US/10787880  
; Publication No. US20050025777A1  
; GENERAL INFORMATION:  
; APPLICANT: Pohlmann, Edward L.  
; APPLICANT: Sheehy, Michael J.  
; APPLICANT: Barton, Kenneth A.  
; TITLE OF INVENTION: PARTICLE-MEDIATED DELIVERY OF ANTIGENS  
; FILE REFERENCE: 033267-018  
; CURRENT APPLICATION NUMBER: US/10/787,880  
; CURRENT FILING DATE: 2004-02-27  
; PRIOR APPLICATION NUMBER: US/09/191,772  
; PRIOR FILING DATE: 1998-11-13  
; NUMBER OF SEQ ID NOS: 2  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 2  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: HIVgp120  
US-10-787-880-2

Query Match 62.6%; Score 77; DB 17; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.0001;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 8 RIQGPGRFVTVIGK 22  
DB 1 RIQGPGRFVTVIGK 15

RESULT 18  
US-10-062-710-44  
; Sequence 44, Application US/10062710

; Publication No. US20030049253A1  
; GENERAL INFORMATION:

; APPLICANT: Li, Frank Q.

; APPLICANT: Chu, Yong-Liang

; APPLICANT: Qiu, Jian-Tai

; TITLE OF INVENTION: Polymeric Conjugates for Delivery of

; TITLE OF INVENTION: MHC-Recognized Epitopes

; TITLE OF INVENTION: Via Peptide Vaccines

; FILE REFERENCE: 3781-001-27

; CURRENT APPLICATION NUMBER: US/10/062,710

; CURRENT FILING DATE: 2002-02-05

; PRIOR APPLICATION NUMBER: US 60/310,498

; PRIOR FILING DATE: 2001-08-08

; NUMBER OF SEQ ID NOS: 232

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 44

; LENGTH: 16

; TYPE: PRT

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: HIV Helper-T Cell Epitopes

US-10-062-710-44

Query Match 62.6%; Score 77; DB 14; Length 16;

Best Local Similarity 100.0%; Pred. No. 0.00011;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 8 RIQPGGRAFTVIGK 22

Db 2 RIQPGGRAFTVIGK 16

RESULT 19

US-10-239-313A-186

; Sequence 186, Application US/10239313A

; Publication No. US20030175285A1

; GENERAL INFORMATION:

; APPLICANT: KLINGUER - HAMOUR, Christine

; APPLICANT: CORVAIA, Nathalie

; APPLICANT: BECK, Alain

; APPLICANT: GOETSCH, Liliane

; TITLE OF INVENTION: MOLECULE OF PHARMACEUTICAL INTEREST COMPRISING AT ITS

; TITLE OF INVENTION: N-TERMINAL A GLUTAMIC ACID OR A GLUTAMINE IN THE FORM

; TITLE OF INVENTION: OF A PHYSIOLOGICALLY ACCEPTABLE STRONG ACID

; FILE REFERENCE: 343 727 - US

; CURRENT APPLICATION NUMBER: US/10/239,313A

; CURRENT FILING DATE: 2002-09-19

; PRIOR APPLICATION NUMBER: FR 00/03711

; PRIOR FILING DATE: 2000-03-23

; PRIOR APPLICATION NUMBER: PCT 01/70772

; PRIOR FILING DATE: 2001-03-22

; NUMBER OF SEQ ID NOS: 697

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 186

; LENGTH: 15

; TYPE: PRT

; ORGANISM: Human immunodeficiency virus

US-10-239-313A-186

Query Match

58.5%; Score 72; DB 14; Length 15;

Best Local Similarity 100.0%; Pred. No. 0.00057;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 10 ORGPGGRAFTVIGKI 23

Db 2 ORGPGGRAFTVIGKI 15

RESULT 20

US-10-373-592-113

; Sequence 113, Application US/10373592

; Publication No. US20040001851A1

; GENERAL INFORMATION:

; APPLICANT: HAYNES, BARTON F.

; APPLICANT: KORBER, BETTE T.

; APPLICANT: DE LORIMIER, ROBERT M.

; TITLE OF INVENTION: POLYVALENT IMMUNOGEN

; FILE REFERENCE: 1579-785

; CURRENT APPLICATION NUMBER: US/10/373,592

; CURRENT FILING DATE: 2003-02-26

; PRIOR APPLICATION NUMBER: 10/289,228

; PRIOR FILING DATE: 2002-11-07

; PRIOR APPLICATION NUMBER: 60/331,036

; PRIOR FILING DATE: 2001-11-07

; NUMBER OF SEQ ID NOS: 120

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 113

; LENGTH: 22

; TYPE: PRT

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Description of Artificial Sequence: Synthetic

; OTHER INFORMATION: peptide

US-10-373-592-113

Query Match 56.1%; Score 69; DB 15; Length 22;

Best Local Similarity 76.2%; Pred. No. 0.0024;

Matches 16; Conservative 0; Mismatches 3; Indels 2; Gaps 1;

Qy 1 NNTKSRIRQPGGRAFTVIG 21

Db 4 NNTKRS--IQIGPGRAFTVIG 22

RESULT 21

US-10-621-675-154

; Sequence 154, Application US/10621675

; Publication No. US20050049398A1

; GENERAL INFORMATION:

; APPLICANT: De Leys, Robert

; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING

; TITLE OF INVENTION: TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN

; TITLE OF INVENTION: A PROCESS FOR DETERMINATION OF ANTIBODIES OF

; TITLE OF INVENTION: BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT

; TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS

; TITLE OF INVENTION: CONTAINING THEM

; FILE REFERENCE: 2752-11

; CURRENT APPLICATION NUMBER: US/10/621,675

; CURRENT FILING DATE: 2003-07-18

; PRIOR APPLICATION NUMBER: US/09/576,824A

; PRIOR FILING DATE: 1996-09-30

; PRIOR APPLICATION NUMBER: 08/723,425

; PRIOR FILING DATE: 1993-11-22

; PRIOR APPLICATION NUMBER: PCT/EP93/00517

; PRIOR FILING DATE: 1993-03-08

; PRIOR APPLICATION NUMBER: EP 92400598.6

; PRIOR FILING DATE: 1992-03-06

; NUMBER OF SEQ ID NOS: 600

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 154

; LENGTH: 23

; TYPE: PRT

; ORGANISM: Human immunodeficiency virus

US-10-621-675-154

Query Match

56.1%; Score 69; DB 17; Length 23;

Best Local Similarity 69.6%; Pred. No. 0.0026;

Matches 16; Conservative 1; Mismatches 4; Indels 2; Gaps 1;

Qy 1 NNTKSRIRQPGGRAFTVIGKI 23

Db 1 NNTKRS--IHIGPGRAFTVIGI 21

RESULT 22



```
US-10-239-313A-536
; Sequence 536, Application US/10239313A
; Publication No. US20030175285A1
; GENERAL INFORMATION:
; APPLICANT: KLINGER - HAMOUR, Christine
; APPLICANT: CORVAIA, Nathalie
; APPLICANT: BECK, Alain
; APPLICANT: GOETSCH, Liliane
; TITLE OF INVENTION: MOLECULE OF PHARMACEUTICAL INTEREST COMPRISING AT ITS
; TITLE OF INVENTION: N-TERMINAL A GLUTAMIC ACID OR A GLUTAMINE IN THE FORM
; TITLE OF INVENTION: OF A PHYSIOLOGICALLY ACCEPTABLE STRONG ACID
; FILE REFERENCE: 343 727 US
; CURRENT APPLICATION NUMBER: US/10/239,313A
; CURRENT FILING DATE: 2002-09-19
; PRIOR APPLICATION NUMBER: FR 00/03711
; PRIOR FILING DATE: 2000-03-23
; PRIOR APPLICATION NUMBER: PCT 01/70772
; PRIOR FILING DATE: 2001-03-22
; NUMBER OF SEQ ID NOS: 697
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 536
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Human immunodeficiency virus
US-10-239-313A-536

Query Match 55.3%; Score 68; DB 14; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.002;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 10 QRGPGRAFTVGK 22
Db 1 QRGPGRAFTVGK 13

RESULT 23
US-10-622-003-6
; Sequence 6, Application US/10622003
; Publication No. US20050014230A1
; GENERAL INFORMATION:
; APPLICANT: Chin, Li-Te
; TITLE OF INVENTION: PREPARATION OF FULLY HUMAN ANTIBODIES
; FILE REFERENCE: 16863-002001
; CURRENT APPLICATION NUMBER: US/10/622,003
; CURRENT FILING DATE: 2003-07-16
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetically generated peptide
US-10-622-003-6

Query Match 55.3%; Score 68; DB 17; Length 15;
Best Local Similarity 93.3%; Pred. No. 0.0023;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 4 RKSERIQRGPGRAV 18
Db 1 RKSIRIQRGPGRAV 15

RESULT 24
US-10-621-675-155
; Sequence 155, Application US/10621675
; Publication No. US20050049398A1
; GENERAL INFORMATION:
; APPLICANT: De Leys, Robert
; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING
; TITLE OF INVENTION: TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN
; TITLE OF INVENTION: A PROCESS FOR DETERMINATION OF ANTIBODIES OF
```

```
; TITLE OF INVENTION: BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT
; TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS
; FILE REFERENCE: 2752-11
; CURRENT APPLICATION NUMBER: US/10/621,675
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US/09/576,824A
; PRIOR FILING DATE: 1996-09-30
; PRIOR APPLICATION NUMBER: 09/146,028
; PRIOR FILING DATE: 1993-11-22
; PRIOR APPLICATION NUMBER: PCT/EP93/00517
; PRIOR FILING DATE: 1993-03-08
; PRIOR APPLICATION NUMBER: EP 92400598.6
; PRIOR FILING DATE: 1992-03-06
; NUMBER OF SEQ ID NOS: 600
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 155
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Human immunodeficiency virus
US-10-621-675-155

Query Match 54.5%; Score 67; DB 17; Length 23;
Best Local Similarity 69.6%; Pred. No. 0.0051;
Matches 16; Conservative 1; Mismatches 4; Indels 2; Gaps 1;

Qy 1 NNTKSERIQRGPGRAFTVGKI 23
Db 1 NNTKRS--IYIGPGRAFTVGTGI 21

RESULT 25
US-09-993-307-21
; Sequence 21, Application US/09993307
; Publication No. US20030162733A1
; GENERAL INFORMATION:
; APPLICANT: HAYNES, Joel R.
; APPLICANT: ARRINGTON, Joshua
; TITLE OF INVENTION: NUCLEIC ACID ADJUVANTS
; FILE REFERENCE: APP41.20
; CURRENT APPLICATION NUMBER: US/09/993,307
; CURRENT FILING DATE: 2001-11-26
; PRIOR APPLICATION NUMBER: 60/253,381
; PRIOR FILING DATE: 2000-11-27
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 21
; LENGTH: 15
; TYPE: PRT
; ORGANISM: synthetic construct
US-09-993-307-21

Query Match 53.7%; Score 66; DB 10; Length 15;
Best Local Similarity 86.7%; Pred. No. 0.0046;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 8 RIQRGPGRAFTVGK 22
Db 1 RIQRGPGRAFTVGK 15

RESULT 26
US-10-373-592-112
; Sequence 112, Application US/10373592
; Publication No. US20040001851A1
; GENERAL INFORMATION:
; APPLICANT: HAYNES, BARTON F.
; APPLICANT: KORBER, BETTE T.
; APPLICANT: DE LORIMIER, ROBERT M.
; TITLE OF INVENTION: POLYVALENT IMMUNOGEN
; FILE REFERENCE: 1579-785
; CURRENT APPLICATION NUMBER: US/10/373,592
```

; CURRENT FILING DATE: 2003-02-26  
; PRIOR APPLICATION NUMBER: 10/289,228  
; PRIOR FILING DATE: 2002-11-07  
; PRIOR APPLICATION NUMBER: 60/331,036  
; PRIOR FILING DATE: 2001-11-07  
; NUMBER OF SEQ ID NOS: 120  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 112  
; LENGTH: 22  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
; OTHER INFORMATION: peptide  
US-10-373-592-112

Query Match 52.0%; Score 64; DB 15; Length 22;  
Best Local Similarity 71.4%; Pred. No. 0.014; 4; Indels 2; Gaps 1;  
Matches 15; Conservative 0; Mismatches 4; Indels 2; Gaps 1;

Qy 1 NNTKSERIQRGPGRAFTVIG 21  
| | | | | | | | | | | | | | | | | | | | | |  
Db 4 NNTKRS--INIGPGRAFTTG 22

RESULT 27  
US-10-373-592-114  
; Sequence 114, Application US/10373592  
; Publication No. US20040001851A1  
; GENERAL INFORMATION:  
; APPLICANT: HAYNES, BARTON F.  
; APPLICANT: KORBER, BETTE T.  
; APPLICANT: DE LORIMIER, ROBERT M.  
; TITLE OF INVENTION: POLYVALENT IMMUNOGEN  
; FILE REFERENCE: 1579-785  
; CURRENT APPLICATION NUMBER: US/10/373,592  
; CURRENT FILING DATE: 2003-02-26  
; PRIOR APPLICATION NUMBER: 10/289,228  
; PRIOR FILING DATE: 2002-11-07  
; PRIOR APPLICATION NUMBER: 60/331,036  
; PRIOR FILING DATE: 2001-11-07  
; NUMBER OF SEQ ID NOS: 120  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 114  
; LENGTH: 22  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
; OTHER INFORMATION: peptide  
US-10-373-592-114

Query Match 52.0%; Score 64; DB 15; Length 22;  
Best Local Similarity 71.4%; Pred. No. 0.014;  
Matches 15; Conservative 0; Mismatches 4; Indels 2; Gaps 1;

Qy 1 NNTKSERIQRGPGRAFTVIG 21  
| | | | | | | | | | | | | | | | | | | | | |  
Db 4 NNTKRS--INIGPGRAFTTG 22

RESULT 28  
US-10-628-004-12  
; Sequence 12, Application US/10628004  
; Publication No. US20050058983A1  
; GENERAL INFORMATION:  
; APPLICANT: ABGENIX, INC.  
; APPLICANT: PUBLIC HEALTH RESEARCH INSTITUTE  
; APPLICANT: PINTER, ABRAHAM  
; APPLICANT: HE, YUXIAN  
; APPLICANT: CORVALAN, JOSE R.  
; TITLE OF INVENTION: USE OF TRANSGENIC MICE FOR THE EFFICIENT ISOLATION OF  
; TITLE OF INVENTION: NOVEL HUMAN MONOCLONAL ANTIBODIES WITH NEUTRALIZING

; TITLE OF INVENTION: ACTIVITY AGAINST PRIMARY HIV-1 STRAINS  
; FILE REFERENCE: ABX-PHRI PCT  
; CURRENT APPLICATION NUMBER: US/10/628,004  
; CURRENT FILING DATE: 2003-07-25  
; NUMBER OF SEQ ID NOS: 28  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 12  
; LENGTH: 24  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
; OTHER INFORMATION: peptide  
US-10-628-004-12

Query Match 52.0%; Score 64; DB 17; Length 24;  
Best Local Similarity 63.6%; Pred. No. 0.015; 8; Indels 0; Gaps 0;  
Matches 14; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

Qy 2 NTRKSERIQRGPGRAFTVIGKI 23  
| | | | | | | | | | | | | | | | | | | | | |  
Db 2 NKRKRIHIQRGPGRAFTTKNI 23

RESULT 29  
US-10-239-313A-535  
; Sequence 535, Application US/10239313A  
; Publication No. US20030175285A1  
; GENERAL INFORMATION:  
; APPLICANT: KLINGUER - HAMOUR, Christine  
; APPLICANT: CORVAIA, Nathalie  
; APPLICANT: BECK, Alain  
; APPLICANT: GOETSCH, Liliane  
; TITLE OF INVENTION: MOLECULE OF PHARMACEUTICAL INTEREST COMPRISING AT ITS  
; TITLE OF INVENTION: N-TERMINAL A GLUTAMIC ACID OR A GLUTAMINE IN THE FORM  
; TITLE OF INVENTION: OF A PHYSIOLOGICALLY ACCEPTABLE STRONG ACID  
; FILE REFERENCE: 343 727 - US  
; CURRENT APPLICATION NUMBER: US/10/239,313A  
; CURRENT FILING DATE: 2002-09-19  
; PRIOR APPLICATION NUMBER: FR 00/03711  
; PRIOR FILING DATE: 2000-03-23  
; PRIOR APPLICATION NUMBER: PCT 01/70772  
; PRIOR FILING DATE: 2001-03-22  
; NUMBER OF SEQ ID NOS: 697  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 535  
; LENGTH: 12  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-239-313A-535

Query Match 51.2%; Score 63; DB 14; Length 12;  
Best Local Similarity 100.0%; Pred. No. 0.01; 0; Indels 0; Gaps 0;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 10 QRGPGRAFTVIG 21  
| | | | | | | | | | | | | | | | | | | | | |  
Db 1 QRGPGRAFTVIG 12

RESULT 30  
US-10-621-675-7  
; Sequence 7, Application US/10621675  
; Publication No. US20050049398A1  
; GENERAL INFORMATION:  
; APPLICANT: De Leye, Robert  
; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING  
; TITLE OF INVENTION: TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN  
; TITLE OF INVENTION: A PROCESS FOR DETERMINATION OF ANTIBODIES OF  
; TITLE OF INVENTION: BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT  
; TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS  
; TITLE OF INVENTION: CONTAINING THEM  
; FILE REFERENCE: 2752-11

```

; OTHER INFORMATION: modified site
US-10-621-675-9

Query Match          49.2%; Score 60.5; DB 17; Length 24;
Best Local Similarity 69.6%; Pred. No. 0.052;
Matches 16; Conservative 1; Mismatches 3; Indels 3; Gaps 2;

QY      1 NNTKRSRIQRGPGRAFTVIGKI 23
      ||||| | ||||| | ||
DB      2 NNTKRS--IYIGPGRFTT-GRI 21

RESULT 32
US-09-956-940-15
; Sequence 15, Application US/09956940
; Publication No. US20030022826A1
; GENERAL INFORMATION:
; APPLICANT: HAYNES, BARTON F.
; TITLE OF INVENTION: USE OF SYNTHETIC PEPTIDES TO INDUCE
; TOLERANCE TO PATHOGENIC T AND B CELL EPITOPES OF
; AUTOANTIGENS OR INFECTIOUS AGENTS
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSER: NIXON & VANDERHYE P.C.
; STREET: 1100 NORTH GLEBE ROAD
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: U.S.A.
; ZIP: 22201-4714
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/956,940
; FILING DATE: 12-Oct-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/460,673
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 08/015,987
; FILING DATE: 10-FEB-1993
; APPLICATION NUMBER: US 07/833,429
; FILING DATE: 10-FEB-1992
; APPLICATION NUMBER: US 07/591,109
; FILING DATE: 01-OCT-1990
; APPLICATION NUMBER: US 07/093,854
; FILING DATE: 08-SEP-1987
; ATTORNEY/AGENT INFORMATION:
; NAME: WILSON, MARY J.
; REGISTRATION NUMBER: 32,955
; REFERENCE/DOCKET NUMBER: 1579-5
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 816-4000
; TELEFAX: (703) 816-4100
; TELEX: 200797 NIXN UR
; INFORMATION FOR SEQ ID NO: 15:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 15:

US-09-956-940-15

Query Match          48.0%; Score 59; DB 10; Length 13;
Best Local Similarity 92.3%; Pred. No. 0.045;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 TRKRSRIQRGPGR 15
      ||||| |||||

```

Db 1 TRKSIRIQGPGR 13

## RESULT 33

US-09-956-940-50

; Sequence 50, Application US/09956940

; Publication No. US20030022826A1

; GENERAL INFORMATION:

; APPLICANT: HAYNES, BARTON F.

; TITLE OF INVENTION: USE OF SYNTHETIC PEPTIDES TO INDUCE

; TOLERANCE TO PATHOGENIC T AND B CELL EPITOPES OF

; AUTOANTIGENS OR INFECTIOUS AGENTS

; NUMBER OF SEQUENCES: 53

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: NIXON & VANDERHYE P.C.

; STREET: 1100 NORTH GLEBE ROAD

; CITY: ARLINGTON

; STATE: VIRGINIA

; COUNTRY: U.S.A.

; ZIP: 22201-4714

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/956,940

; FILING DATE: 12-Oct-2001

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US/08/460,673

; FILING DATE: <Unknown>

; APPLICATION NUMBER: US 08/015,987

; FILING DATE: 10-FEB-1993

; APPLICATION NUMBER: US 07/833,429

; FILING DATE: 10-FEB-1992

; APPLICATION NUMBER: US 07/591,109

; FILING DATE: 01-OCT-1990

; APPLICATION NUMBER: US 07/093,854

; FILING DATE: 08-SEP-1987

; ATTORNEY/AGENT INFORMATION:

; NAME: WILSON, MARY J.

; REGISTRATION NUMBER: 32,955

; REFERENCE/DOCKET NUMBER: 1579-5

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (703) 816-4000

; TELEFAX: (703) 816-4100

; TELEX: 200797 NIXN UR

; INFORMATION FOR SEQ ID NO: 50:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 15 amino acids

; TYPE: amino acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: protein

; SEQUENCE DESCRIPTION: SEQ ID NO: 50:

US-09-956-940-50

Query Match

Best Local Similarity 48.0%; Score 59; DB 10; Length 15;

Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 TRKSIRIQGPGR 15

Db 2 TRKSIRIQGPGR 14

## RESULT 34

US-10-360-647A-1

; Sequence 1, Application US/10360647A

; Publication No. US20040039178A1

; GENERAL INFORMATION:

; APPLICANT: Siedel, Christoph

; APPLICANT: Wienhues, Ursula-Henrike

; APPLICANT: Hoss, Eva

; TITLE OF INVENTION: METAL CHELATE-LABELLED PEPTIDES

; FILE REFERENCE: 2923-529

; CURRENT APPLICATION NUMBER: US/10/360,647A

; CURRENT FILING DATE: 2003-02-10

; PRIOR APPLICATION NUMBER: US 08/776189

; PRIOR FILING DATE: 1997-01-24

; PRIOR APPLICATION NUMBER: PCT/EP95/02916

; PRIOR FILING DATE: 1995-07-24

; PRIOR APPLICATION NUMBER: DE 44 30 998.8

; PRIOR FILING DATE: 1994-08-31

; PRIOR APPLICATION NUMBER: DE 44 26 276.0

; PRIOR FILING DATE: 1994-07-25

; NUMBER OF SEQ ID NOS: 29

; SOFTWARE: PatentIn version 3.2

; SEQ ID NO 1

; LENGTH: 17

; TYPE: PRT

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: polypeptide/antigen/epitope

US-10-360-647A-1

Query Match 48.0%; Score 59; DB 15; Length 17;

Best Local Similarity 73.7%; Pred. No. 0.06;

Matches 14; Conservative 0; Mismatches 3; Indels 2; Gaps 1;

Qy 1 NNTRKSERIQGPGRFVT 19

Db 1 NNTRK--ISIGPGRFYT 17

## RESULT 35

US-10-613-018-1

; Sequence 1, Application US/10613018

; Publication No. US20050074750A1

; GENERAL INFORMATION:

; APPLICANT: WEINHUES, URSULA-HENRIKE

; APPLICANT: KRUSE-MULLER, CORNELIA

; APPLICANT: HOSS, EVA

; APPLICANT: FAATZ, ELKE

; APPLICANT: OFENLOCH-HAHNLE, BEATUS

; APPLICANT: SEIDEL, CHRISTOPH

; APPLICANT: WIEDMANN, MICHAEL

; TITLE OF INVENTION: DETERMINATION OF A SPECIFIC IMMUNOGLOBULIN USING

; TITLE OF INVENTION: MULTIPLE ANTIGENS

; FILE REFERENCE: 100564-07003

; CURRENT APPLICATION NUMBER: US/10/613,018

; CURRENT FILING DATE: 2003-07-07

; PRIOR APPLICATION NUMBER: PCT/EP95/02919

; PRIOR FILING DATE: 1995-07-24

; PRIOR APPLICATION NUMBER: P 44 26 276.0

; PRIOR FILING DATE: 1994-07-25

; PRIOR APPLICATION NUMBER: P 44 30 972.4

; PRIOR FILING DATE: 1994-08-31

; NUMBER OF SEQ ID NOS: 77

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 1

; LENGTH: 17

; TYPE: PRT

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Description of Artificial Sequence: Epitope region

; OTHER INFORMATION: of HIV type 1, HIV type 2 or HIV subtype O

US-10-613-018-1

Query Match

Best Local Similarity 48.0%; Score 59; DB 17; Length 17;

Best Local Similarity 73.7%; Pred. No. 0.06;

Matches 14; Conservative 0; Mismatches 3; Indels 2; Gaps 1;

Qy 1 NNTRKSERIQGPGRFVT 19

Db 1 NNTRK--ISIGPGRFYT 17

```
Db      1 NNRKRS--ISIGPGRAFTV 17

RESULT 36
US-10-613-018-22
; Sequence 22, Application US/10613018
; Publication No. US20050074750A1
; GENERAL INFORMATION:
; APPLICANT: WEINHUES, URSULA-HENRIKE
; APPLICANT: KRUSE-MULLER, CORNELIA
; APPLICANT: HOSS, EVA
; APPLICANT: FAATZ, ELKE
; APPLICANT: OFENLOCH-HAHNLE, BEATUS
; APPLICANT: SEIDEL, CHRISTOPH
; APPLICANT: WIEDMANN, MICHAEL
; TITLE OF INVENTION: DETERMINATION OF A SPECIFIC IMMUNOGLOBULIN USING
; FILE REFERENCE: 100564-07003
; CURRENT FILING DATE: 2003-07-07
; PRIOR APPLICATION NUMBER: PCT/EP95/02919
; PRIOR FILING DATE: 1995-07-24
; PRIOR APPLICATION NUMBER: P 44 26 276.0
; PRIOR FILING DATE: 1994-07-25
; PRIOR APPLICATION NUMBER: P 44 30 972.4
; PRIOR FILING DATE: 1994-08-31
; NUMBER OF SEQ ID NOS: 77
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 22
; LENGTH: 21
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic peptide
; NAME/KEY: MOD_RES
; LOCATION: (1)_
; OTHER INFORMATION: BPRU
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (2)_
; OTHER INFORMATION: Beta-alanine
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (3)_
; OTHER INFORMATION: Epsilon-aminocaproic acid
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (4)_
; OTHER INFORMATION: Beta-alanine
; OTHER INFORMATION: Beta-alanine
US-10-613-018-40

Query Match      48.0%; Score 59; DB 17; Length 21;
Best Local Similarity 73.7%; Pred. No. 0.075;
Matches 14; Conservative 0; Mismatches 3; Indels 2; Gaps 1;

Qy      1 NNRKSERIQRGPGRAFTV 19
Db      5 NNRKRS--ISIGPGRAFTV 21

RESULT 38
US-10-311-111-3
; Sequence 3, Application US/10311111
; Publication No. US20030121065A1
; GENERAL INFORMATION:
; APPLICANT: SHIBA, KIYOTAKA
; TITLE OF INVENTION: MULTIFUNCTIONAL BASE SEQUENCE AND ARTIFICIAL GENE CONTAINING THE
; FILE REFERENCE: 4439-4004
; CURRENT APPLICATION NUMBER: US/10/311,111
; CURRENT FILING DATE: 2002-12-13
; PRIOR APPLICATION NUMBER: JP 2000-180997
; PRIOR FILING DATE: 2000-06-16
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 13
; TYPE: PRT
; ORGANISM: artificial
; FEATURE:
; OTHER INFORMATION: Designed peptide
US-10-311-111-3

Query Match      47.2%; Score 58; DB 14; Length 13;
Best Local Similarity 91.7%; Pred. No. 0.064;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      8 RIQRGPGRAFTV 19
```

```
Db      1 NNRKRS--ISIGPGRAFTV 17

RESULT 36
US-10-613-018-22
; Sequence 22, Application US/10613018
; Publication No. US20050074750A1
; GENERAL INFORMATION:
; APPLICANT: WEINHUES, URSULA-HENRIKE
; APPLICANT: KRUSE-MULLER, CORNELIA
; APPLICANT: HOSS, EVA
; APPLICANT: FAATZ, ELKE
; APPLICANT: OFENLOCH-HAHNLE, BEATUS
; APPLICANT: SEIDEL, CHRISTOPH
; APPLICANT: WIEDMANN, MICHAEL
; TITLE OF INVENTION: DETERMINATION OF A SPECIFIC IMMUNOGLOBULIN USING
; FILE REFERENCE: 100564-07003
; CURRENT FILING DATE: 2003-07-07
; PRIOR APPLICATION NUMBER: PCT/EP95/02919
; PRIOR FILING DATE: 1995-07-24
; PRIOR APPLICATION NUMBER: P 44 26 276.0
; PRIOR FILING DATE: 1994-07-25
; PRIOR APPLICATION NUMBER: P 44 30 972.4
; PRIOR FILING DATE: 1994-08-31
; NUMBER OF SEQ ID NOS: 77
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 22
; LENGTH: 21
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic peptide
; NAME/KEY: MOD_RES
; LOCATION: (1)_
; OTHER INFORMATION: Digoxigenin-3-cme
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (2)_
; OTHER INFORMATION: Beta-alanine
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (3)_
; OTHER INFORMATION: Epsilon-aminocaproic acid
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (4)_
; OTHER INFORMATION: Beta-alanine
US-10-613-018-22

Query Match      48.0%; Score 59; DB 17; Length 21;
Best Local Similarity 73.7%; Pred. No. 0.075;
Matches 14; Conservative 0; Mismatches 3; Indels 2; Gaps 1;

Qy      1 NNRKSERIQRGPGRAFTV 19
Db      5 NNRKRS--ISIGPGRAFTV 21

RESULT 37
US-10-613-018-40
; Sequence 40, Application US/10613018
; Publication No. US20050074750A1
; GENERAL INFORMATION:
; APPLICANT: WEINHUES, URSULA-HENRIKE
; APPLICANT: KRUSE-MULLER, CORNELIA
; APPLICANT: HOSS, EVA
; APPLICANT: FAATZ, ELKE
; APPLICANT: OFENLOCH-HAHNLE, BEATUS
; APPLICANT: SEIDEL, CHRISTOPH
; APPLICANT: WIEDMANN, MICHAEL
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Db 2 RIQRGPGRTFTV 13  
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RESULT 39  
US-10-398-932-3  
; Sequence 3, Application US/10398932  
; Publication No. US20040171803A1  
; GENERAL INFORMATION:  
; APPLICANT: SHIBA, KIYOTAKA  
; APPLICANT: OHNO, TSUNEYA  
; TITLE OF INVENTION: ARTIFICIAL PROTEINS WITH ENRICHED IMMUNOGEN  
; FILE OF INVENTION: OF EPITOPE  
; CURRENT APPLICATION NUMBER: US/10/398,932  
; CURRENT FILING DATE: 2003-04-11  
; PRIOR APPLICATION NUMBER: PCT/JP01/08893  
; PRIOR FILING DATE: 2001-10-10  
; PRIOR APPLICATION NUMBER: JP 2000/314288  
; PRIOR FILING DATE: 2000-10-13  
; NUMBER OF SEQ ID NOS: 55  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 3  
; LENGTH: 13  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Synthetically Designed  
US-10-398-932-3  
Query Match 47.2%; Score 58; DB 16; Length 13;  
Best Local Similarity 91.7%; Pred. No. 0.064;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 8 RIQRGPGRTFTV 19  
|||||  
Db 2 RIQRGPGRTFTV 13  
RESULT 40  
US-09-901-106-10  
; Sequence 10, Application US/09901106  
; Patent No. US20020151067A1  
; GENERAL INFORMATION:  
; APPLICANT: Garoff, Henrik  
; Liljestrom, Peter  
; TITLE OF INVENTION: DNA Expression Systems Based on  
; Alphaviruses  
; NUMBER OF SEQUENCES: 27  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Birch, Stewart, Kolasch & Birch  
; STREET: P.O. Box 747  
; CITY: Falls Church  
; STATE: Virginia  
; COUNTRY: USA  
; ZIP: 22040-0747  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/901,106  
; FILING DATE: 10-Jul-2001  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/07/920,281C  
; FILING DATE: 13-AUG-1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Murphy Jr., Gerald M.  
; REGISTRATION NUMBER: 28,977  
; REFERENCE/DOCKET NUMBER: 828-103P

; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-241-1300  
; TELEFAX: 703-241-2848  
; TELEX: 248345  
; INFORMATION FOR SEQ ID NO: 10:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; SEQUENCE DESCRIPTION: SEQ ID NO: 10:  
US-09-901-106-10  
Query Match 47.2%; Score 58; DB 9; Length 15;  
Best Local Similarity 84.6%; Pred. No. 0.075;  
Matches 11; Conservative 1; Mismatches 0; Gaps 0;  
Qy 8 RIQRGPGRTFTV 20  
|||||  
Db 3 RIQRGPGRTFTV 15  
RESULT 41  
US-10-621-675-158  
; Sequence 158, Application US/10621675  
; Publication No. US20050049398A1  
; GENERAL INFORMATION:  
; APPLICANT: De Leys, Robert  
; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING  
; TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN  
; TITLE OF INVENTION: A PROCESS FOR DETERMINATION OF ANTIBODIES OF  
; TITLE OF INVENTION: BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT  
; TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS  
; TITLE OF INVENTION: CONTAINING THEM  
; FILE REFERENCE: 2752-11  
; CURRENT APPLICATION NUMBER: US/10/621,675  
; CURRENT FILING DATE: 2003-07-18  
; PRIOR APPLICATION NUMBER: US/09/576,824A  
; PRIOR FILING DATE: 08/723,425  
; PRIOR APPLICATION NUMBER: 03/146,028  
; PRIOR FILING DATE: 1993-11-22  
; PRIOR APPLICATION NUMBER: PCT/EP93/00517  
; PRIOR FILING DATE: 1993-03-08  
; PRIOR APPLICATION NUMBER: EP 92400598.6  
; PRIOR FILING DATE: 1992-03-06  
; NUMBER OF SEQ ID NOS: 600  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 158  
; LENGTH: 23  
; TYPE: PRT  
; ORGANISM: Human immunodeficiency virus  
US-10-621-675-158  
Query Match 47.2%; Score 58; DB 17; Length 23;  
Best Local Similarity 56.5%; Pred. No. 0.12;  
Matches 13; Conservative 2; Mismatches 6; Indels 2; Gaps 1;  
Qy 1 NNTKSKRIQRGPGRTFTVTKI 23  
|||||  
Db 1 NNTKSK--ITKGRVIVYATGQI 21  
RESULT 42  
US-10-621-675-12  
; Sequence 12, Application US/10621675  
; Publication No. US20050049398A1  
; GENERAL INFORMATION:  
; APPLICANT: De Leys, Robert  
; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING  
; TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN  
; TITLE OF INVENTION: A PROCESS FOR DETERMINATION OF ANTIBODIES OF  
; TITLE OF INVENTION: BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT

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; TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS
; TITLE OF INVENTION: CONTAINING THEM
; FILE REFERENCE: 2752-11
; CURRENT APPLICATION NUMBER: US/10/621,675
; PRIOR FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US/09/576,824A
; PRIOR APPLICATION NUMBER: 08/723,425
; PRIOR FILING DATE: 1996-09-30
; PRIOR APPLICATION NUMBER: 09/146,028
; PRIOR FILING DATE: 1993-11-22
; PRIOR APPLICATION NUMBER: PCT/EP93/00517
; PRIOR FILING DATE: 1993-03-08
; PRIOR APPLICATION NUMBER: EP 92400598.6
; PRIOR FILING DATE: 1992-03-06
; NUMBER OF SEQ ID NOS: 600
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12
; LENGTH: 25
; TYPE: PRT
; ORGANISM: Human immunodeficiency virus
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: (1)
; OTHER INFORMATION: modified site
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: (25)
; OTHER INFORMATION: modified site
US-10-621-675-12

Query Match      47.2%; Score 58; DB 17; Length 25;
Best Local Similarity 56.5%; Pred. No. 0.13;
Matches 13; Conservative 2; Mismatches 6; Indels 2; Gaps 1;

QY 1 NNTKSRIRQCGPGRFVTVIGKI 23
DB 2 NNTKRS--ITKGPGRVIVATGQI 22

RESULT 43
US-10-239-313A-533
; Sequence 533, Application US/10239313A
; Publication No. US20030175285A1
; GENERAL INFORMATION:
; APPLICANT: KLINGUER - HAMOUR, Christine
; APPLICANT: CORVAIA, Nathalie
; APPLICANT: BECK, Alain
; APPLICANT: GOETSCH, Liliane
; TITLE OF INVENTION: MOLECULE OF PHARMACEUTICAL INTEREST COMPRISING AT ITS
; N-TERMINAL A GLUTAMIC ACID OR A GLUTAMINE IN THE FORM
; OF A PHYSIOLOGICALLY ACCEPTABLE STRONG ACID
; FILE REFERENCE: 343 727 - US
; CURRENT APPLICATION NUMBER: US/10/239,313A
; CURRENT FILING DATE: 2002-09-19
; PRIOR APPLICATION NUMBER: FR 00/03711
; PRIOR FILING DATE: 2000-03-23
; PRIOR APPLICATION NUMBER: PCT 01/70772
; PRIOR FILING DATE: 2001-03-22
; NUMBER OF SEQ ID NOS: 597
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 533
; LENGTH: 11
; TYPE: PRT
; ORGANISM: Mus musculus
US-10-239-313A-533

Query Match      46.3%; Score 57; DB 14; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.076;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 10 QRGPGRAFVTI 20
DB 1 QRGPGRAFVTI 11

; TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS
; TITLE OF INVENTION: CONTAINING THEM
; FILE REFERENCE: 2752-11
; CURRENT APPLICATION NUMBER: US/10/621,675
; PRIOR FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US/09/576,824A
; PRIOR APPLICATION NUMBER: 08/723,425
; PRIOR FILING DATE: 1996-09-30
; PRIOR APPLICATION NUMBER: 09/146,028
; PRIOR FILING DATE: 1993-11-22
; PRIOR APPLICATION NUMBER: PCT/EP93/00517
; PRIOR FILING DATE: 1993-03-08
; PRIOR APPLICATION NUMBER: EP 92400598.6
; PRIOR FILING DATE: 1992-03-06
; NUMBER OF SEQ ID NOS: 600
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12
; LENGTH: 25
; TYPE: PRT
; ORGANISM: Human immunodeficiency virus
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: (1)
; OTHER INFORMATION: modified site
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: (25)
; OTHER INFORMATION: modified site
US-10-621-675-12

Query Match      47.2%; Score 58; DB 17; Length 25;
Best Local Similarity 56.5%; Pred. No. 0.13;
Matches 13; Conservative 2; Mismatches 6; Indels 2; Gaps 1;

QY 1 NNTKSRIRQCGPGRFVTVIGKI 23
DB 2 NNTKRS--ITKGPGRVIVATGQI 22

RESULT 43
US-10-239-313A-533
; Sequence 533, Application US/10239313A
; Publication No. US20030175285A1
; GENERAL INFORMATION:
; APPLICANT: KLINGUER - HAMOUR, Christine
; APPLICANT: CORVAIA, Nathalie
; APPLICANT: BECK, Alain
; APPLICANT: GOETSCH, Liliane
; TITLE OF INVENTION: MOLECULE OF PHARMACEUTICAL INTEREST COMPRISING AT ITS
; N-TERMINAL A GLUTAMIC ACID OR A GLUTAMINE IN THE FORM
; OF A PHYSIOLOGICALLY ACCEPTABLE STRONG ACID
; FILE REFERENCE: 343 727 - US
; CURRENT APPLICATION NUMBER: US/10/239,313A
; CURRENT FILING DATE: 2002-09-19
; PRIOR APPLICATION NUMBER: FR 00/03711
; PRIOR FILING DATE: 2000-03-23
; PRIOR APPLICATION NUMBER: PCT 01/70772
; PRIOR FILING DATE: 2001-03-22
; NUMBER OF SEQ ID NOS: 597
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 533
; LENGTH: 11
; TYPE: PRT
; ORGANISM: Mus musculus
US-10-239-313A-533

Query Match      46.3%; Score 57; DB 14; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.076;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 10 QRGPGRAFVTI 20
DB 1 QRGPGRAFVTI 11
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RESULT 44
US-09-901-106-12
; Sequence 12, Application US/09901106
; Patent No. US20020151067A1
; GENERAL INFORMATION:
; APPLICANT: Garoff, Henrik
; Liljestrom, Peter
; TITLE OF INVENTION: DNA Expression Systems Based on
; Alphaviruses
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolasch & Birch
; STREET: P.O. Box 747
; CITY: Falls Church
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22040-0747
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/901,106
; FILING DATE: 10-Jul-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/07/920,281C
; FILING DATE: 13-AUG-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Murphy Jr., Gerald M.
; REGISTRATION NUMBER: 28,977
; REFERENCE/DOCKET NUMBER: 828-103P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-241-1300
; TELEFAX: 703-241-2848
; TELEX: 248345
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 17 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 12:
US-09-901-106-12

Query Match      46.3%; Score 57; DB 9; Length 17;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 8 RIQGPGRFV 18
DB 4 RIQGPGRFV 14

RESULT 45
US-10-178-488-24
; Sequence 24, Application US/10178488
; Publication No. US20030165535A1
; GENERAL INFORMATION:
; APPLICANT: Rovinski, Benjamin
; APPLICANT: Cao, Shi-Xian
; APPLICANT: Yao, Fei-Long
; APPLICANT: Persson, Roy
; APPLICANT: Klein, Michel H.
; TITLE OF INVENTION: RETROVIRUS-LIKE PARTICLES MADE NON-INFECTIOUS BY A
; TITLE OF INVENTION: PLURALITY OF MUTATIONS
; FILE REFERENCE: 1038-1238 MIS
; CURRENT APPLICATION NUMBER: US/10/178,488
; CURRENT FILING DATE: 2002-10-25
; PRIOR APPLICATION NUMBER: 09/258,128
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; PRIOR FILING DATE: 1999-02-26
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 24
; LENGTH: 19
; TYPE: PRT
; ORGANISM: Unknown Organism
; FEATURE:
; OTHER INFORMATION: Description of Unknown Organism: Artificial
US-10-178-488-24

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|--------------------------|--------|-----------------|-----------|------------|
| Query Match              | 46.3%  | Score 57;       | DB 14;    | Length 19; |
| Best Local Similarity    | 66.7%; | Pred. No. 0.14; |           |            |
| Matches 14; Conservative | 1;     | Mismatches 4;   | Indels 2; | Gaps 1;    |

Search completed: May 16, 2005, 13:10:22  
Job time : 113.231 secs



GenCore version 5.1.1.6  
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OM protein - protein search, using sw model

Run on: May 16, 2005, 12:52:18 ; Search time 36.9231 Seconds  
(without alignments)  
48.522 Million cell updates/sec

Title: US-08-869-386-3

Perfect score: 123

Sequence: 1 NNTKSEIQRGPRAFVIGKIG 24

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 218077

Minimum DB seq length: 0

Maximum DB seq length: 25

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents AA\*  
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2: /cgn2\_6/ptodata/1/1aa/5B\_COMB.pep:\*  
3: /cgn2\_6/ptodata/1/1aa/6A\_COMB.pep:\*  
4: /cgn2\_6/ptodata/1/1aa/6B\_COMB.pep:\*  
5: /cgn2\_6/ptodata/1/1aa/PTUS\_COMB.pep:\*  
6: /cgn2\_6/ptodata/1/1aa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID                   | Description       |
|------------|-------|-------------|--------|----------------------|-------------------|
| 1          | 115   | 93.5        | 24     | 1 US-08-097-751-1    | Sequence 1, Appli |
| 2          | 115   | 93.5        | 24     | 1 US-08-090-148-6    | Sequence 6, Appli |
| 3          | 115   | 93.5        | 24     | 2 US-08-146-028-160  | Sequence 160, App |
| 4          | 115   | 93.5        | 24     | 3 US-08-723-425A-160 | Sequence 160, App |
| 5          | 115   | 93.5        | 24     | 3 US-08-480-332-2    | Sequence 2, Appli |
| 6          | 115   | 93.5        | 24     | 3 US-09-112-206-160  | Sequence 160, App |
| 7          | 115   | 93.5        | 24     | 4 US-09-790-497A-14  | Sequence 14, Appl |
| 8          | 115   | 93.5        | 24     | 4 US-09-790-497A-160 | Sequence 160, App |
| 9          | 115   | 93.5        | 24     | 4 US-09-576-824A-160 | Sequence 160, App |
| 10         | 115   | 93.5        | 24     | 4 US-09-680-497-160  | Sequence 160, App |
| 11         | 115   | 93.5        | 24     | 5 PCT-US92-06688-12  | Sequence 12, Appl |
| 12         | 115   | 93.5        | 24     | 5 PCT-US92-10378-3   | Sequence 3, Appli |
| 13         | 115   | 93.5        | 25     | 3 US-08-485-324-13   | Sequence 13, Appl |
| 14         | 115   | 93.5        | 25     | 3 US-08-485-324-31   | Sequence 31, Appl |
| 15         | 115   | 93.5        | 25     | 3 US-08-447-506-13   | Sequence 13, Appl |
| 16         | 115   | 93.5        | 25     | 3 US-08-447-506-31   | Sequence 31, Appl |
| 17         | 115   | 93.5        | 25     | 3 US-08-235-437-13   | Sequence 13, Appl |
| 18         | 115   | 93.5        | 25     | 3 US-08-235-437-31   | Sequence 31, Appl |
| 19         | 115   | 93.5        | 25     | 3 US-08-447-515-13   | Sequence 13, Appl |
| 20         | 115   | 93.5        | 25     | 3 US-08-447-515-31   | Sequence 31, Appl |
| 21         | 109   | 88.6        | 24     | 1 US-08-257-528B-99  | Sequence 99, Appl |
| 22         | 109   | 88.6        | 24     | 1 US-08-460-602A-99  | Sequence 99, Appl |
| 23         | 109   | 88.6        | 24     | 1 US-08-463-966A-99  | Sequence 99, Appl |
| 24         | 109   | 88.6        | 24     | 1 US-08-465-217A-99  | Sequence 99, Appl |
| 25         | 109   | 88.6        | 24     | 2 US-08-464-329A-99  | Sequence 99, Appl |
| 26         | 109   | 88.6        | 24     | 2 US-08-463-507A-99  | Sequence 99, Appl |
| 27         | 109   | 88.6        | 24     | 2 US-08-467-881A-99  | Sequence 99, Appl |

Query Match 93.5%; Score 115; DB 1; Length 24;  
Best Local Similarity 95.8%; Pred. No. 2.5e-10;

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|----|-----|------|----|--------------------|-------------------|
| 28 | 109 | 88.6 | 25 | 2 US-08-266-448-1  | Sequence 1, Appli |
| 29 | 105 | 85.4 | 25 | 2 US-07-950-571A-1 | Sequence 2, Appli |
| 30 | 103 | 83.7 | 22 | 2 US-08-345-321-2  | Sequence 1, Appli |
| 31 | 101 | 82.1 | 22 | 2 US-08-537-245-1  | Sequence 5, Appli |
| 32 | 99  | 80.5 | 22 | 3 US-08-805-889-5  | Sequence 5, Appli |
| 33 | 99  | 80.5 | 22 | 3 US-09-070-291-5  | Sequence 4, Appli |
| 34 | 94  | 76.4 | 21 | 2 US-08-452-503A-4 | Sequence 4, Appli |
| 35 | 94  | 76.4 | 21 | 2 US-08-453-745A-4 | Sequence 25, Appl |
| 36 | 94  | 76.4 | 21 | 2 US-08-470-419-25 | Sequence 25, Appl |
| 37 | 94  | 76.4 | 21 | 2 US-08-761-828-25 | Sequence 25, Appl |
| 38 | 94  | 76.4 | 21 | 2 US-08-452-520B-4 | Sequence 4, Appli |
| 39 | 94  | 76.4 | 21 | 2 US-08-290-105-25 | Sequence 25, Appl |
| 40 | 94  | 76.4 | 21 | 3 US-08-776-949-25 | Sequence 25, Appl |
| 41 | 94  | 76.4 | 21 | 3 US-08-482-810-25 | Sequence 25, Appl |
| 42 | 94  | 76.4 | 21 | 3 US-09-027-955-25 | Sequence 25, Appl |
| 43 | 94  | 76.4 | 21 | 3 US-09-636-805-25 | Sequence 25, Appl |
| 44 | 94  | 76.4 | 21 | 4 US-09-258-128-25 | Sequence 25, Appl |
| 45 | 94  | 76.4 | 21 | 4 US-09-635-754-25 | Sequence 25, Appl |

ALIGNMENTS

RESULT 1  
US-08-097-751-1  
; Sequence 1, Application US/08097751  
; Patent No. 5527666  
; GENERAL INFORMATION:  
; APPLICANT: DeRossi, Anita  
; APPLICANT: Pasti, Marcella  
; APPLICANT: Mammano, Fabrizio  
; APPLICANT: Panozzo, Marina  
; APPLICANT: Dettin, Monica  
; APPLICANT: DiBello, Carlo  
; APPLICANT: Chieco-Bianchi, Luigi  
; TITLE OF INVENTION: METHOD FOR THE DIAGNOSIS IN VITRO OF  
; TITLE OF INVENTION: HIV-1 VIRUS INFECTIONS  
; NUMBER OF SEQUENCES: 2  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Hedman, Gibson, Costigan & Hoare  
; STREET: 1185 Avenue of the Americas  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10036  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage  
; COMPUTER: IBM PS/2  
; OPERATING SYSTEM: DOS  
; SOFTWARE: Word Perfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/097,751  
; FILING DATE: 19930723  
; CLASSIFICATION: 530  
; PRIOR APPLICATION NUMBER:  
; FILING DATE:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Costigan, James V.  
; REGISTRATION NUMBER: 25,669  
; REFERENCE/DOCKET NUMBER: 515-4026  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (212) 302-8989  
; TELEFAX: (212) 302-8998  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 24 amino acids  
; TYPE: amino acid  
; TOPOLOGY: circular  
US-08-097-751-1

```
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 NNTKSRIRQPGRAFTVIGKIG 24
    ||||| ||||| ||||| ||||| |||||
Db 1 NNTKSRIRQPGRAFTVIGKIG 24

RESULT 2
US-08-090-148-6
; Sequence 6, Application US/08090148
; Patent No. 5534257
; GENERAL INFORMATION:
; APPLICANT: Mastico, Robert Allan
; APPLICANT: Stockley, Peter George
; APPLICANT: Talbot, Simon John
; TITLE OF INVENTION: Antigen-Presenting Capsid with
; TITLE OF INVENTION: Fusion MS2-Coat Protein
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Rosenman & Colin
; STREET: 575 Madison Avenue
; CITY: New York
; STATE: NY
; COUNTRY: U.S.A.
; ZIP: 10022-2585
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.5", 1.44Mb
; COMPUTER: IBM PS2-486
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/090,148
; FILING DATE: 08/11/93
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 9101550.3
; FILING DATE: 01/24/91
; APPLICATION NUMBER: PCT/GB92/00124
; FILING DATE: 01/22/92
; ATTORNEY/AGENT INFORMATION:
; NAME: Nissenbaum, Israel
; REGISTRATION NUMBER: 27,582
; REFERENCE/DOCKET NUMBER:
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 940-8636
; TELEFAX: (212) 940-6404
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 AMINO ACIDS
; TYPE: AMINO ACID
; TOPOLOGY: NOT RELEVANT
; MOLECULE TYPE: PEPTIDE
US-08-090-148-6

Query Match 93.5%; Score 115; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 2.5e-10;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 NNTKSRIRQPGRAFTVIGKIG 24
    ||||| ||||| ||||| ||||| |||||
Db 1 NNTKSRIRQPGRAFTVIGKIG 24

RESULT 3
US-08-146-028-160
; Sequence 160, Application US/08146028
; Patent No. 5891640
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES
; TITLE OF INVENTION: CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR
; TITLE OF INVENTION: IN A PROCESS FOR DETERMINATION OF ANTIBODIES OR BIOTINYLATED
; TITLE OF INVENTION: PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES,
;

Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 NNTKSRIRQPGRAFTVIGKIG 24
    ||||| ||||| ||||| ||||| |||||
Db 1 NNTKSRIRQPGRAFTVIGKIG 24

RESULT 4
US-08-723-425A-160
; Sequence 160, Application US/08723425A
; Patent No. 6165730
; GENERAL INFORMATION:
; APPLICANT: DELEYS, ROBERT
; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF
; TITLE OF INVENTION: PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT
; TITLE OF INVENTION: EPITOPES AND THEIR USE IN A PROCESS FOR DETERMINATION OF
; TITLE OF INVENTION: ANTIBODIES OR BIOTINYLATED PEPTIDES CORRESPONDING ...
; NUMBER OF SEQUENCES: 453
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: NIXON & VANDERHUYE, P.C.
; STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
; CITY: Arlington
; STATE: VA
; COUNTRY: USA
; ZIP: 22201
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/723,425A
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: SADOFF, B.J.
; REGISTRATION NUMBER: 36,663
; REFERENCE/DOCKET NUMBER: 1487-13
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-816-4000
; TELEFAX: 703-816-4100
; INFORMATION FOR SEQ ID NO: 160:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-723-425A-160

Query Match 93.5%; Score 115; DB 3; Length 24;
Best Local Similarity 95.8%; Pred. No. 2.5e-10;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
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; Patent No. 6210903
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES
; TITLE OF INVENTION: CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR
; TITLE OF INVENTION: IN A PROCESS FOR DETERMINATION OF ANTIBODIES OR BIOTINYLATED
; TITLE OF INVENTION: PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES,
; TITLE OF INVENTION: PROCESS FOR PREPARING THEM AND COMPOSITIONS CONTAINING THEM
; NUMBER OF SEQUENCES: 453
; COMPUTER SEQUENCES: 1
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/112.206
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/146,028
; FILING DATE:
; INFORMATION FOR SEQ ID NO: 160:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-09-112-206-160

Query Match 93.5%; Score 115; DB 3; Length 24;
Best Local Similarity 95.8%; Pred. No. 2.5e-10;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 NNTKRSRIQRGPGRAFTVIGKIG 24
Db 1 NNTKRSRIQRGPGRAFTVIGKIG 24

RESULT 7
US-09-790-497A-14
; Sequence 14, Application US/09790497A
; Patent No. 6649735
; GENERAL INFORMATION:
; APPLICANT: De Leys, Robert
; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING
; TITLE OF INVENTION: TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN
; TITLE OF INVENTION: A PROCESS FOR DETERMINATION OF ANTIBODIES OF
; TITLE OF INVENTION: BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT
; TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS
; TITLE OF INVENTION: CONTAINING THEM
; FILE REFERENCE: 2752-16
; CURRENT APPLICATION NUMBER: US/09/790,497A
; CURRENT FILING DATE: 2001-02-23
; PRIOR APPLICATION NUMBER: 09/576,824
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 08/723,425
; PRIOR FILING DATE: 1996-09-30
; PRIOR APPLICATION NUMBER: 09/146,028
; PRIOR FILING DATE: 1993-11-22
; PRIOR APPLICATION NUMBER: PCT/EP93/00517
; PRIOR FILING DATE: 1993-03-08
; PRIOR APPLICATION NUMBER: EP 92400598.6
; PRIOR FILING DATE: 1992-03-06
; NUMBER OF SEQ ID NOS: 600
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 14
; LENGTH: 24
; TYPE: "PRT"
; ORGANISM: Human immunodeficiency virus
; US-09-790-497A-14

Query Match 93.5%; Score 115; DB 4; Length 24;
Best Local Similarity 95.8%; Pred. No. 2.5e-10;

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Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 NNTKSRIRIQGPGRAFTVIGKIG 24
    ||||| ||||| ||||| ||||| |||||
Db 1 NNTKSRIRIQGPGRAFTVIGKIG 24
    ||||| ||||| ||||| ||||| |||||

RESULT 8
US-09-790-497A-160
; Sequence 160, Application US/09790497A
; Patent No. 6649735
; GENERAL INFORMATION:
; APPLICANT: De Leys, Robert
; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING
; TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN
; TITLE OF INVENTION: A PROCESS FOR DETERMINATION OF ANTIBODIES OF
; TITLE OF INVENTION: BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT
; TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS
; FILE REFERENCE: 2752-16
; CURRENT APPLICATION NUMBER: US/09/790,497A
; CURRENT FILING DATE: 2001-02-23
; PRIOR APPLICATION NUMBER: 09/576,824
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 08/723,425
; PRIOR FILING DATE: 1996-09-30
; PRIOR APPLICATION NUMBER: 09/146,028
; PRIOR FILING DATE: 1993-11-22
; PRIOR APPLICATION NUMBER: PCT/EP93/00517
; PRIOR FILING DATE: 1993-03-08
; PRIOR APPLICATION NUMBER: EP 92400598.6
; PRIOR FILING DATE: 1992-03-06
; NUMBER OF SEQ ID NOS: 600
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 160
; LENGTH: 24
; TYPE: PRT
; ORGANISM: Human immunodeficiency virus
US-09-790-497A-160

Query Match 93.5%; Score 115; DB 4; Length 24;
Best Local Similarity 95.8%; Pred. No. 2.5e-10;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 NNTKSRIRIQGPGRAFTVIGKIG 24
    ||||| ||||| ||||| ||||| |||||
Db 1 NNTKSRIRIQGPGRAFTVIGKIG 24
    ||||| ||||| ||||| ||||| |||||

RESULT 9
US-09-576-824A-160
; Sequence 160, Application US/09576824A
; Patent No. 6667387
; GENERAL INFORMATION:
; APPLICANT: De Leys, Robert
; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING
; TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN
; TITLE OF INVENTION: A PROCESS FOR DETERMINATION OF ANTIBODIES OF
; TITLE OF INVENTION: BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT
; TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS
; FILE REFERENCE: 2752-11
; CURRENT APPLICATION NUMBER: US/09/576,824A
; CURRENT FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 08/723,425
; PRIOR FILING DATE: 1996-09-30
; PRIOR APPLICATION NUMBER: 09/146,028
; PRIOR FILING DATE: 1993-11-22
; PRIOR APPLICATION NUMBER: PCT/EP93/00517
; PRIOR FILING DATE: 1993-03-08
; PRIOR APPLICATION NUMBER: EP 92400598.6
; PRIOR FILING DATE: 1992-03-06
; NUMBER OF SEQ ID NOS: 600
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; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 160
; LENGTH: 24
; TYPE: PRT
; ORGANISM: Human immunodeficiency virus
US-09-576-824A-160

Query Match 93.5%; Score 115; DB 4; Length 24;
Best Local Similarity 95.8%; Pred. No. 2.5e-10;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 NNTKSRIRIQGPGRAFTVIGKIG 24
    ||||| ||||| ||||| ||||| |||||
Db 1 NNTKSRIRIQGPGRAFTVIGKIG 24
    ||||| ||||| ||||| ||||| |||||

RESULT 10
US-09-680-497-160
; Sequence 160, Application US/09680497
; Patent No. 6709828
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES
; TITLE OF INVENTION: CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR
; TITLE OF INVENTION: IN A PROCESS FOR DETERMINATION OF ANTIBODIES OR BIOTINYLATED
; TITLE OF INVENTION: PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES,
; TITLE OF INVENTION: PROCESS FOR PREPARING THEM AND COMPOSITIONS CONTAINING THEM
; NUMBER OF SEQUENCES: 453
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/680,497
; FILING DATE: 06-OCT-2000
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/146,028
; FILING DATE: 22-NOV-1993
; INFORMATION FOR SEQ ID NO: 160:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-680-497-160

Query Match 93.5%; Score 115; DB 4; Length 24;
Best Local Similarity 95.8%; Pred. No. 2.5e-10;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 NNTKSRIRIQGPGRAFTVIGKIG 24
    ||||| ||||| ||||| ||||| |||||
Db 1 NNTKSRIRIQGPGRAFTVIGKIG 24
    ||||| ||||| ||||| ||||| |||||

RESULT 11
PCT-US92-06688-12
; Sequence 12, Application PC/TUS9206688
; GENERAL INFORMATION:
; APPLICANT: REPLIGEN CORPORATION
; APPLICANT: THE ROCKEFELLER UNIVERSITY
; TITLE OF INVENTION: MULTIPLE ANTIGEN PEPTIDES FOR USE AS HIV
; TITLE OF INVENTION: VACCINES
; NUMBER OF SEQUENCES: 21
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: U.S.A.
; ZIP: 02110-2804
```

COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
COMPUTER: IBM PS/2 Model 50Z or 55SX  
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)  
SOFTWARE: WordPerfect (Version 5.1)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US92/06688  
FILING DATE: 19920811  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 744,281  
FILING DATE: 13 August 1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Paul T. Clark  
REGISTRATION NUMBER: 30,162  
REFERENCE/DOCKET NUMBER: 00231/052WO1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (617) 542-5070  
TELEFAX: (617) 542-8906  
INFORMATION FOR SEQ ID NO: 12:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24  
TYPE: AMINO ACID  
TOPOLOGY: linear  
PCT-US92-06688-12

Query Match 93.5%; Score 115; DB 5; Length 24;  
Best Local Similarity 95.8%; Pred. No. 2.5e-10;  
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 NNTKRSRIQRGPGRAFTVIGKIG 24  
Db 1 NNTKRSRIQRGPGRAFTVIGKIG 24

RESULT 12  
PCT-US92-10378-3  
Sequence 3, Application PC/TUS9210378  
GENERAL INFORMATION:  
APPLICANT: BOARD OF REGENTS, THE UNIVERSITY OF  
APPLICANT: TEXAS SYSTEM  
APPLICANT: SASTRY, Jagannadha K.  
APPLICANT: ARLINGHAUS, Ralph B.  
APPLICANT: PLATSOUKAS, Chris D.  
APPLICANT: NEHETE, Pramod N.  
TITLE OF INVENTION: METHODS AND COMPOSITIONS  
FOR ELICITING IMMUNE OR ANTI-INFECTION RESPONSES  
TITLE OF INVENTION: 7  
NUMBER OF SEQUENCES: 7  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Arnold, White & Durkee  
STREET: P.O. Box 4433  
CITY: Houston  
STATE: Texas  
COUNTRY: US  
ZIP: 77210  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: WordPerfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US92/10378  
FILING DATE: 19921202  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/800,932  
FILING DATE: December 2, 1991  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/945865  
FILING DATE: September 16, 1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Parker, David L.

REGISTRATION NUMBER: 32,165  
REFERENCE/DOCKET NUMBER: UTFC305PCT  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 512-320-7200  
TELEFAX: 512-474-7577  
TELEX: Not Applicable  
INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: AMINO ACID  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
PCT-US92-10378-3

Query Match 93.5%; Score 115; DB 5; Length 24;  
Best Local Similarity 95.8%; Pred. No. 2.5e-10;  
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 NNTKRSRIQRGPGRAFTVIGKIG 24  
Db 1 NNTKRSRIQRGPGRAFTVIGKIG 24

RESULT 13  
US-08-485-324-13  
Sequence 13, Application US/08485324  
Patent No. 6043093  
GENERAL INFORMATION:  
APPLICANT: Wohlstadter, Jacob  
TITLE OF INVENTION: SELECTION METHODS  
NUMBER OF SEQUENCES: 31  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Curtis, Morris, & Safford  
ADDRESSEE: c/o Barry Evans  
STREET: 530 Fifth Avenue  
CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/485,324  
FILING DATE: 07-JUN-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/235,437  
FILING DATE: 29-APR-1994  
APPLICATION NUMBER: US 07/852,412  
FILING DATE: 16-MAR-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Evans, Barry  
REGISTRATION NUMBER: 22,802  
REFERENCE/DOCKET NUMBER: 370132-2000  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 840-3333  
TELEFAX: (212) 840-0712  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 25 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-485-324-13

Query Match 93.5%; Score 115; DB 3; Length 25;  
Best Local Similarity 95.8%; Pred. No. 2.6e-10;  
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 NNTRKSIRIQGPGRAFTVIGKIG 24  
Db 1 NNTRKSIRIQGPGRAFTVIGKIG 24

## RESULT 14

US-08-485-324-31  
; Sequence 31, Application US/08485324  
; Patent No. 6043093  
; GENERAL INFORMATION:  
; APPLICANT: Wohlstadter, Jacob  
; TITLE OF INVENTION: SELECTION METHODS  
; NUMBER OF SEQUENCES: 31  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Curtis, Morris, & Safford  
; ADDRESSEE: c/o Barry Evans  
; STREET: 530 Fifth Avenue  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10036  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/485,324  
; FILING DATE: 07-JUN-1995  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/235,437  
; FILING DATE: 29-APR-1994  
; APPLICATION NUMBER: US 07/852,412  
; FILING DATE: 16-MAR-1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Evans, Barry  
; REGISTRATION NUMBER: 22,802  
; REFERENCE/DOCKET NUMBER: 370132-2000  
; TELEPHONE: (212) 840-3333  
; TELEFAX: (212) 840-0712  
; INFORMATION FOR SEQ ID NO: 31:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 25 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-485-324-31

Query Match 93.5%; Score 115; DB 3; Length 25;  
Best Local Similarity 95.8%; Pred. No. 2.6e-10;  
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 NNTRKSIRIQGPGRAFTVIGKIG 24  
Db 1 NNTRKSIRIQGPGRAFTVIGKIG 24

## RESULT 15

US-08-447-506-13  
; Sequence 13, Application US/08447506  
; Patent No. 6066499  
; GENERAL INFORMATION:  
; APPLICANT: Wohlstadter, Jacob  
; TITLE OF INVENTION: SELECTION METHODS  
; NUMBER OF SEQUENCES: 31  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Curtis, Morris, & Safford  
; ADDRESSEE: c/o Barry Evans  
; STREET: 530 Fifth Avenue  
; CITY: New York  
; STATE: New York

; COUNTRY: USA  
; ZIP: 10036  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/447,506  
; FILING DATE: 23-MAY-1995  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/235,437  
; FILING DATE: 29-APR-1994  
; APPLICATION NUMBER: US 07/852,412  
; FILING DATE: 16-MAR-1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Evans, Barry  
; REGISTRATION NUMBER: 22,802  
; REFERENCE/DOCKET NUMBER: 370132-2000  
; TELEPHONE: (212) 840-3333  
; TELEFAX: (212) 840-0712  
; INFORMATION FOR SEQ ID NO: 13:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 25 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-447-506-13

Query Match 93.5%; Score 115; DB 3; Length 25;  
Best Local Similarity 95.8%; Pred. No. 2.6e-10;  
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 NNTRKSIRIQGPGRAFTVIGKIG 24  
Db 1 NNTRKSIRIQGPGRAFTVIGKIG 24

## RESULT 16

US-08-447-506-31  
; Sequence 31, Application US/08447506  
; Patent No. 6066499  
; GENERAL INFORMATION:  
; APPLICANT: Wohlstadter, Jacob  
; TITLE OF INVENTION: SELECTION METHODS  
; NUMBER OF SEQUENCES: 31  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Curtis, Morris, & Safford  
; ADDRESSEE: c/o Barry Evans  
; STREET: 530 Fifth Avenue  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10036  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/447,506  
; FILING DATE: 23-MAY-1995  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/235,437  
; FILING DATE: 29-APR-1994  
; APPLICATION NUMBER: US 07/852,412  
; FILING DATE: 16-MAR-1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Evans, Barry  
; REGISTRATION NUMBER: 22,802

; REFERENCE/DOCKET NUMBER: 370132-2000  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (212) 840-3333  
; TELEFAX: (212) 840-0712  
; INFORMATION FOR SEQ ID NO: 31:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 25 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-447-506-31

Query Match 93.5%; Score 115; DB 3; Length 25;  
Best Local Similarity 95.8%; Pred. No. 2.6e-10;  
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 1 NNTKSRIRQGRGPAFTVIGKIG 24  
Db 1 NNTKSRIRQGRGPAFTVIGKIG 24

RESULT 17  
US-08-235-437-13  
; Sequence 13, Application US/08235437  
; Patent No. 6087177  
; GENERAL INFORMATION:  
; APPLICANT: Wohlstadter, Jacob  
; TITLE OF INVENTION: SELECTION METHODS  
; NUMBER OF SEQUENCES: 31  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Curtis, Morris, & Safford  
; ADDRESSEE: c/o Barry Evans  
; STREET: 530 Fifth Avenue  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10036  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/235,437  
; FILING DATE: 29-APR-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/852,412  
; FILING DATE: 16-MAR-1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Evans, Barry  
; REGISTRATION NUMBER: 22,802  
; REFERENCE/DOCKET NUMBER: 370132-2000  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (212) 840-3333  
; TELEFAX: (212) 840-0712  
; INFORMATION FOR SEQ ID NO: 13:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 25 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-235-437-13

Query Match 93.5%; Score 115; DB 3; Length 25;  
Best Local Similarity 95.8%; Pred. No. 2.6e-10;  
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 1 NNTKSRIRQGRGPAFTVIGKIG 24  
Db 1 NNTKSRIRQGRGPAFTVIGKIG 24

RESULT 18  
US-08-235-437-31  
; Sequence 31, Application US/08235437  
; Patent No. 6087177  
; GENERAL INFORMATION:  
; APPLICANT: Wohlstadter, Jacob  
; TITLE OF INVENTION: SELECTION METHODS  
; NUMBER OF SEQUENCES: 31  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Curtis, Morris, & Safford  
; ADDRESSEE: c/o Barry Evans  
; STREET: 530 Fifth Avenue  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10036  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/235,437  
; FILING DATE: 29-APR-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/852,412  
; FILING DATE: 16-MAR-1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Evans, Barry  
; REGISTRATION NUMBER: 22,802  
; REFERENCE/DOCKET NUMBER: 370132-2000  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (212) 840-3333  
; TELEFAX: (212) 840-0712  
; INFORMATION FOR SEQ ID NO: 31:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 25 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-235-437-31

Query Match 93.5%; Score 115; DB 3; Length 25;  
Best Local Similarity 95.8%; Pred. No. 2.6e-10;  
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 1 NNTKSRIRQGRGPAFTVIGKIG 24  
Db 1 NNTKSRIRQGRGPAFTVIGKIG 24

RESULT 19  
US-08-447-515-13  
; Sequence 13, Application US/08447515  
; Patent No. 6162640  
; GENERAL INFORMATION:  
; APPLICANT: Wohlstadter, Jacob  
; TITLE OF INVENTION: SELECTION METHODS  
; NUMBER OF SEQUENCES: 31  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Curtis, Morris, & Safford  
; ADDRESSEE: c/o Barry Evans  
; STREET: 530 Fifth Avenue  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10036  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.25

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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/447,515
FILING DATE: 23-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/235,437
FILING DATE: 29-APR-1994
APPLICATION NUMBER: US 07/852,412
FILING DATE: 16-MAR-1992
ATTORNEY/AGENT INFORMATION:
NAME: Evans, Barry
REGISTRATION NUMBER: 22,802
REFERENCE/DOCKET NUMBER: 370132-2000
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 840-3333
TELEFAX: (212) 840-0712
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 25 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-447-515-13

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Query Match      93.5%; Score 115; DB 3; Length 25;
Best Local Similarity 95.8%; Pred.No. 2.6e-10;
Matches 23; Conservative 0; Mismatches -1; Indels

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Db       1 NNTKRSIRIQRGGRFVFTIGIG 24
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; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-447-515-31

Query Match          93.5%; Score 115; DB 3; Length 25;
Best Local Similarity 95.8%; Pred. No. 2.6e-10;
Matches 23; Conservative 0; Mismatches 1; Indels

QY      1  NNTRKSERIQRGPGRAFTVIGKIG 24
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Db       1  NNTRKSIIRIQGPGRAFTVIGKIG 24
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Query Match      88.6%; Score 109; DB 1; Length 34;
Best Local Similarity 95.7%; Pred. No. 1.9e-09;
Matches 22; Conservative 0; Mismatches 1; Indels

QY      2 NTRKSERIQRGGRAFTVIGIG 24
          ||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db       1 NTRKSIIRIQRGGRAFTVIGIG 23
          ||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

```

RESULT 22  
US-08-460-602A-99  
; Sequence 99, Application US/08460602A  
; Patent No. 5759769  
; GENERAL INFORMATION:  
; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; APPLICANT: KLEIN, Michel H.  
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides



```
;
; NUMBER OF SEQUENCES: 101
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: Suite 701, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: MSG 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/460,602A
; FILING DATE: 02-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/257,528
; FILING DATE: 09-JUN-1994
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/073,378
; FILING DATE: 09-JUN-1993
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, MICHAEL I.
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-450 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 99:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
US-08-460-602A-99

Query Match 88.6%; Score 109; DB 1; Length 24;
Best Local Similarity 95.7%; Pred. No. 1.9e-09;
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 NTRKSERIQRGGRAFTVIGKIG 24
Db 1 NTRKSIRIQRGGRAFTVIGKIG 23

RESULT 23
US-08-463-966A-99
; Sequence 99, Application US/08463966A
; Patent No. 5795955
; GENERAL INFORMATION:
; APPLICANT: SIA, Charles D.Y.
; APPLICANT: CHONG, Pele
; APPLICANT: KLEIN, Michel H.
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides
; NUMBER OF SEQUENCES: 101
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: Suite 701, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: MSG 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/463,966A
```

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;
; FILING DATE: 05-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/257,528
; FILING DATE: 09-JUN-1994
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/073,378
; FILING DATE: 09-JUN-1993
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, MICHAEL I.
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-487 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 99:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
US-08-463-966A-99

Query Match 88.6%; Score 109; DB 1; Length 24;
Best Local Similarity 95.7%; Pred. No. 1.9e-09;
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 NTRKSERIQRGGRAFTVIGKIG 24
Db 1 NTRKSIRIQRGGRAFTVIGKIG 23

RESULT 24
US-08-465-217A-99
; Sequence 99, Application US/08465217A
; Patent No. 5800822
; GENERAL INFORMATION:
; APPLICANT: SIA, Charles D.Y.
; APPLICANT: CHONG, Pele
; APPLICANT: KLEIN, Michel H.
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides
; NUMBER OF SEQUENCES: 101
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: Suite 701, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: MSG 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/465,217A
; FILING DATE: 05-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/257,528
; FILING DATE: 09-JUN-1994
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/073,378
; FILING DATE: 09-JUN-1993
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, MICHAEL I.
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-486 MIS:jb
; TELECOMMUNICATION INFORMATION:
```

TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 99:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-465-217A-99

Query Match 88.6%; Score 109; DB 1; Length 24;  
Best Local Similarity 95.7%; Pred. No. 1.9e-09;  
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 NTRKSIRIQGPGRAFTVIGKIG 24  
Db 1 NTRKSIRIQGPGRAFTVIGKIG 23

## RESULT 25

US-08-464-329A-99  
Sequence 99, Application US/08464329A  
Patent No. 5817754  
GENERAL INFORMATION:

APPLICANT: SIA, Charles D.Y.  
APPLICANT: CHONG, Pele  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESS:

ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/464,329A

FILING DATE: 05-JUN-1995

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/257,528

FILING DATE: 09-JUN-1994

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/073,378

FILING DATE: 09-JUN-1993

CLASSIFICATION: 424

ATTORNEY/AGENT INFORMATION:

NAME: STEWART, MICHAEL I.

REGISTRATION NUMBER: 24,973

REFERENCE/DOCKET NUMBER: 1038-449 MIS:j.b

TELECOMMUNICATION INFORMATION:

TELEPHONE: (416) 595-1155

TELEFAX: (416) 595-1163

INFORMATION FOR SEQ ID NO: 99:

SEQUENCE CHARACTERISTICS:

LENGTH: 24 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

US-08-464-329A-99

## Query Match

Best Local Similarity 88.6%; Score 109; DB 2; Length 24;  
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 NTRKSIRIQGPGRAFTVIGKIG 24

Db 1 NTRKSIRIQGPGRAFTVIGKIG 23

## RESULT 26

US-08-462-507A-99  
Sequence 99, Application US/08462507A  
Patent No. 5876731  
GENERAL INFORMATION:

APPLICANT: SIA, Charles D.Y.  
APPLICANT: CHONG, Pele  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESS:

ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/462,507A

FILING DATE: 05-JUN-1995

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/257,528

FILING DATE: 09-JUN-1994

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/073,378

FILING DATE: 09-JUN-1993

CLASSIFICATION: 424

ATTORNEY/AGENT INFORMATION:

NAME: STEWART, MICHAEL I.

REGISTRATION NUMBER: 24,973

REFERENCE/DOCKET NUMBER: 1038-451 MIS:j.b

TELECOMMUNICATION INFORMATION:

TELEPHONE: (416) 595-1155

TELEFAX: (416) 595-1163

INFORMATION FOR SEQ ID NO: 99:

SEQUENCE CHARACTERISTICS:

LENGTH: 24 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

US-08-462-507A-99

## Query Match

Best Local Similarity 88.6%; Score 109; DB 2; Length 24;  
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 NTRKSIRIQGPGRAFTVIGKIG 24

Db 1 NTRKSIRIQGPGRAFTVIGKIG 23

## RESULT 27

US-08-467-881A-99  
Sequence 99, Application US/08467881A  
Patent No. 5951986  
GENERAL INFORMATION:

APPLICANT: SIA, Charles D.Y.  
APPLICANT: CHONG, Pele  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESS:

ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/467,881A  
FILING DATE: 06-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/257,528  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/073,378  
FILING DATE: 09-JUN-1993  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-488 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 99:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-467-881A-99

Query Match 88.6%; Score 109; DB 2; Length 24;  
Best Local Similarity 95.7%; Pred. No. 1.9e-09;  
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 NTRKSERIQRGRAFTVIGKIG 24  
|||||  
Db 1 NTRKSIIRIQRGRAFTVIGKIG 23  
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RESULT 28  
US-08-266-448-1  
; Sequence 1, Application US/08266448  
; Patent No. 5876724  
; GENERAL INFORMATION:  
; APPLICANT: GIRARD, Marc  
; TITLE OF INVENTION: INDUCTION OF PROTECTION AGAINST VIRAL  
; TITLE OF INVENTION: INFECTION BY SYNERGY BETWEEN VIRUS ENVELOPE GLYCOPROTEIN  
; TITLE OF INVENTION: AND PEPTIDES CORRESPONDING TO NEUTRALIZATION EPITOPES OF  
; TITLE OF INVENTION: THE GLYCOPROTEIN  
; NUMBER OF SEQUENCES: 23  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: FINNEGAN, HENDERSON, FARABOW, GARRETT &  
; ADDRESSEE: DUNNER, L.L.P.  
; STREET: 1300 I Street, N.W.  
; CITY: Washington  
; STATE: D.C.  
; COUNTRY: U.S.A.  
; ZIP: 20005  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/266,448

; FILING DATE: 28-JUN-1994  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/145,664  
; FILING DATE: 04-NOV-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/782,241  
; FILING DATE: 28-OCT-1991  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/672,647  
; FILING DATE: 18-MAR-1991  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/494,749  
; FILING DATE: 19-MAR-1990  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Meyers, Kenneth J.  
; REGISTRATION NUMBER: 25,146  
; REFERENCE/DOCKET NUMBER: 03495.0088-13  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (202) 408-4132  
; TELEFAX: (202) 408-4400  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 25 amino acids  
; TYPE: amino acid  
; STRANDEDNESS:  
; TOPOLOGY: not relevant  
; MOLECULE TYPE: peptide  
; US-08-266-448-1

Query Match 88.6%; Score 109; DB 2; Length 25;  
Best Local Similarity 95.7%; Pred. No. 2e-09;  
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 NTRKSERIQRGRAFTVIGKIG 24  
|||||  
Db 2 NTRKSIIRIQRGRAFTVIGKIG 24  
|||||

RESULT 29  
US-07-950-571A-1  
; Sequence 1, Application US/07950571A  
; Patent No. 5854400  
; GENERAL INFORMATION:  
; APPLICANT: Chang, Tse Wen, Fung, Michael S.C., Sun, Bill N.C., Sun, Cecily R.Y.,  
; APPLICANT: Chang, Nancy T.  
; TITLE OF INVENTION: Monoclonal Antibodies which Neutralize HIV-1 Infection  
; NUMBER OF SEQUENCES: 8  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Tanox Biosystems, Inc.  
; STREET: 10301 Stella Link Rd.  
; CITY: Houston  
; STATE: Texas  
; COUNTRY: USA  
; ZIP: 77025  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5" Hi Density Diskette  
; COMPUTER: IBM PS/2  
; OPERATING SYSTEM: DOS, Version 3.30  
; SOFTWARE: Wordperfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/07/950,571A  
; FILING DATE: 19920922  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: No. 5854400 07/767,533  
; FILING DATE: 09/26/1991  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Mirabel, Eric P.  
; REGISTRATION NUMBER: 31,211  
; REFERENCE/DOCKET NUMBER: TNX87-11BBC  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 713-664-2288

```

; TELEFAX: 713-664-8914
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 amino acids
; TYPE: AMINO ACID
; TOPOLOGY: Linear
;
US-07-950-571A-1
Query Match      85.4%; Score 105; DB 2; Length 25;
Best Local Similarity 95.5%; Pred. No. 7.8e-09;
Matches 21; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 NNTRKSERIQGPGRAFTVIGK 22
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Db 4 NNTRKSIRIQGPGRAFTVIGK 25
    ||||| ||||| ||||| |||||

RESULT 30
US-08-345-321-2
; Sequence 2, Application US/08345321
; Patent No. 5914109
; GENERAL INFORMATION:
; APPLICANT: ZOLLA-PAZNER, Susan
; APPLICANT: GORNY, Miroslav K.
; TITLE OF INVENTION: HETEROHYBRIDOMAS PRODUCING HUMAN
; TITLE OF INVENTION: MONOCLONAL ANTIBODIES TO HIV-1
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Browdy and Neimark
; STREET: 419 Seventh Street, N.W., Suite 300
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20004
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/345,321
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/07/872,675
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Browdy, Roger L.
; REGISTRATION NUMBER: 25,618
; REFERENCE/DOCKET NUMBER: ZOLLA-PAZNER1B
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-628-5197
; TELEFAX: 202-737-3528
; TELEX: 248633
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
; ORGANISM: Homo sapiens
; INDIVIDUAL ISOLATE: IIBB
; FEATURE:
; NAME/KEY: Peptide
; LOCATION: 1..22
; OTHER INFORMATION: /note= "This sequence corresponds
; OTHER INFORMATION: to 303 to 324 of gp120 from the IIBB isolate."
;
US-08-345-321-2
Query Match      83.7%; Score 103; DB 2; Length 22;
Best Local Similarity 95.5%; Pred. No. 1.3e-08;

Matches 21; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 TRKSERIQGPGRAFTVIGK 24
    ||||| ||||| ||||| |||||
Db 1 TRKSIRIQGPGRAFTVIGK 22
    ||||| ||||| ||||| |||||

RESULT 31
US-08-537-245-1
; Sequence 1, Application US/08537245
; Patent No. 5985275
; GENERAL INFORMATION:
; APPLICANT: Neurath, A. Robert, Debnath, Asim K.,
; APPLICANT: Jiang, Shibo
; TITLE OF INVENTION: Proteins and Peptides Modified By
; TITLE OF INVENTION: Aromatic Acid Anhydride Compounds
; NUMBER OF SEQUENCES: 1
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Frishauf, Holtz, Goodman & Woodward
; STREET: 600 Third Avenue
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10016
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3+ inch, 0.72 mb storage
; COMPUTER: IBM PC
; OPERATING SYSTEM: MS DOS
; SOFTWARE: ASCII
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/537,245
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/420,573
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Barth, Richard
; REGISTRATION NUMBER: 28,180
; REFERENCE/DOCKET NUMBER: 950157/RSB
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 972-1400
; TELEFAX: (212) 370-1622
; TELEX: 236268
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 amino acids
; TYPE: amino acid
; STRANDEDNESS: single stranded
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA to genomic RNA
;
US-08-537-245-1
Query Match      82.1%; Score 101; DB 2; Length 22;
Best Local Similarity 90.9%; Pred. No. 2.6e-08;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 NNTRKSERIQGPGRAFTVIGK 22
    ||||| ||||| ||||| |||||
Db 1 NNTRKKIRIQGPGRAFTVIGK 22
    ||||| ||||| ||||| |||||

RESULT 32
US-08-805-889-5
; Sequence 5, Application US/08805889
; Patent No. 6039957
; GENERAL INFORMATION:
; APPLICANT: Earl, Patricia L.
; APPLICANT: Broder, Christopher C.
; APPLICANT: Doms, Robert W.
; TITLE OF INVENTION: Oligomeric HIV-1 Envelope Glycoproteins
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Knobbe, Martens, Olson and Bear
```

```
; STREET: 620 Newport Center Drive 16th Floor
; CITY: Newport Beach
; STATE: CA
; ZIP: 92660
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/805,889
; FILING DATE: 03-MAR-1997
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/165,314
; FILING DATE: 10-DEC-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Fuller, Michael L.
; REGISTRATION NUMBER: 36,516
; REFERENCE/DOCKET NUMBER: NIH079.001A
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 619-235-8550
; TELEFAX: 619-235-0176
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: internal
; US-08-805-889-5

Query Match 80.5%; Score 99; DB 3; Length 22;
Best Local Similarity 95.2%; Pred. No. 5.2e-08;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 NTRKSIRIQGPGRAFTVIGK 22
Db 2 NTRKSIRIQGPGRAFTVIGK 22

RESULT 33
US-09-070-291-5
; Sequence 5, Application US/09070291
; Patent No. 6171596
; GENERAL INFORMATION:
; APPLICANT: Earl, Patricia L.
; APPLICANT: Broder, Christopher C.
; APPLICANT: Doms, Robert W.
; APPLICANT: Moss, Bernard
; TITLE OF INVENTION: Oligomeric HIV-1 Envelope Glycoproteins
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Knobbe, Martens, Olson and Bear
; STREET: 620 Newport Center Drive 16th Floor
; CITY: Newport Beach
; STATE: CA
; ZIP: 92660
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/070,291
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Vensko, Nancy Ways
; REGISTRATION NUMBER: 36,298
```

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; REFERENCE/DOCKET NUMBER: NIH079.1DVCP1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 619-235-8550
; TELEFAX: 619-235-0176
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: internal
; US-09-070-291-5

Query Match 80.5%; Score 99; DB 3; Length 22;
Best Local Similarity 95.2%; Pred. No. 5.2e-08;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 NTRKSIRIQGPGRAFTVIGK 22
Db 2 NTRKSIRIQGPGRAFTVIGK 22

RESULT 34
US-08-452-503A-4
; Sequence 4, Application US/08452503A
; Patent No. 5849475
; GENERAL INFORMATION:
; APPLICANT: Rovinski, Benjamin
; APPLICANT: Haynes, Joel
; APPLICANT: Cao, Shi Xian
; APPLICANT: Klein, Michel H
; TITLE OF INVENTION: Retrovirus-Like Particles Containing
; TITLE OF INVENTION: Modified Envelope Glycoproteins
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: 330 University Avenue, 6th Floor
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5G 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/452,503A
; FILING DATE: 30-MAY-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/073,526
; FILING DATE: 09-JAN-1993
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Stewart, Michael I.
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-447 MIS:as
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-452-503A-4

Query Match 76.4%; Score 94; DB 2; Length 21;
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Best Local Similarity 90.5%; Pred. No. 2.7e-07;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 2 NTRKSERIQRGPGRAFTVIGK 22  
Db 1 NTRKRIRIQRGPGRAFTVIGK 21

RESULT 35  
US-08-453-745A-4  
; Sequence 4, Application US/08453745A  
; Patent No. 5866137  
; GENERAL INFORMATION:  
; APPLICANT: Rovinski, Benjamin  
; APPLICANT: Haynes, Joel  
; APPLICANT: Cao, Shi Xian  
; APPLICANT: Klein, Michel H  
; TITLE OF INVENTION: Retrovirus-Like Particles Containing  
; TITLE OF INVENTION: Modified Envelope Glycoproteins  
; NUMBER OF SEQUENCES: 7  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: 330 University Avenue, 6th Floor  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: M5G 1R7  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION NUMBER: US/08/453,745A  
; FILING DATE: 30-MAY-1995  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/073,526  
; FILING DATE: 09-JAN-1993  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Stewart, Michael I  
; REGISTRATION NUMBER: 24,73  
; REFERENCE/DOCKET NUMBER: 1038-445 MIS:as  
; TELEPHONE: (416) 595-1155  
; TELEFAX: (416) 595-1163  
; INFORMATION FOR SEQ ID NO: 4:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 21 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-453-745A-4

Query Match 76.4%; Score 94; DB 2; Length 21;  
Best Local Similarity 90.5%; Pred. No. 2.7e-07;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2 NTRKSERIQRGPGRAFTVIGK 22  
Db 1 NTRKRIRIQRGPGRAFTVIGK 21

RESULT 36  
US-08-470-419-25  
; Sequence 25, Application US/08470419  
; Patent No. 5866320  
; GENERAL INFORMATION:  
; APPLICANT: ROVINSKI, Benjamin  
; APPLICANT: CAO, Shi-Xian  
; APPLICANT: YAO, Fei-Long  
; APPLICANT: PERSSON, Roy

; APPLICANT: KLEIN, Michel H  
; TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIONOUS  
; RETROVIRUS-LIKE PARTICLES  
; NUMBER OF SEQUENCES: 26  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: Suite 701, 330 University Avenue  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: M5G 1R7  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION NUMBER: US/08/470,419  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/290,105  
; FILING DATE: August 15, 1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: STEWART, Michael I  
; REGISTRATION NUMBER: 24,973  
; REFERENCE/DOCKET NUMBER: 1038-385 MIS:jb  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 595-1155  
; TELEFAX: (416) 595-1163  
; INFORMATION FOR SEQ ID NO: 25:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 21 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-470-419-25

Query Match 76.4%; Score 94; DB 2; Length 21;  
Best Local Similarity 90.5%; Pred. No. 2.7e-07;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2 NTRKSERIQRGPGRAFTVIGK 22  
Db 1 NTRKRIRIQRGPGRAFTVIGK 21

RESULT 37  
US-08-761-828-25  
; Sequence 25, Application US/08761828  
; Patent No. 5879925  
; GENERAL INFORMATION:  
; APPLICANT: ROVINSKI, Benjamin  
; APPLICANT: CAO, Shi-Xian  
; APPLICANT: YAO, Fei-Long  
; APPLICANT: PERSSON, Roy  
; APPLICANT: KLEIN, Michel H  
; TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIONOUS RETROVIRUS-LIKE PARTICLES  
; NUMBER OF SEQUENCES: 26  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: 6TH Floor, 330 University Avenue  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: M5G 1R7  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/761,828

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; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-452-520B-4

Query Match 76.4%; Score 94; DB 2; Length 21;
Best Local Similarity 90.5%; Pred. No. 2.7e-07;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 NTRKSRIRQGPGRFVTTGK 22
Db 1 NTRKRIRIQGPGRFVTTGK 21
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RESULT 39
US-08-290-105-25
; Sequence 25, Application US/08290105
; Patent No. 595342
; GENERAL INFORMATION:
; APPLICANT: ROVINSKI, Benjamin
; APPLICANT: CAO, Shi-Xian
; APPLICANT: YAO, Fei-Long
; APPLICANT: PERSSON, Roy
; APPLICANT: KLEIN, Michel H
; TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIOUS
; TITLE OF INVENTION: RETROVIRUS-LIKE PARTICLES
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: Suite 701, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5G 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/290,105
; FILING DATE: August 15, 1994
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, Michael I
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-385 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-290-105-25

Query Match 76.4%; Score 94; DB 2; Length 21;
Best Local Similarity 90.5%; Pred. No. 2.7e-07;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 NTRKSRIRQGPGRFVTTGK 22
Db 1 NTRKRIRIQGPGRFVTTGK 21
|||||

RESULT 40
US-08-776-949-25
; Sequence 25, Application US/08776949
; Patent No. 6025125
; GENERAL INFORMATION:
; APPLICANT: ROVINSKI, Benjamin
; APPLICANT: CAO, Shi-Xian

```

APPLICANT: Yao, Fei-Long  
APPLICANT: Persson, Roy  
APPLICANT: Klein, Michel H  
TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIOUS  
RETROVIRUS-LIKE PARTICLES  
NUMBER OF SEQUENCES: 31  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: 6th Floor, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/776,949  
FILING DATE: 02-JUN-1997  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Stewart, Michael I  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-673 MIS:jb  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-776-949-25

Query Match 76.4%; Score 94; DB 3; Length 21;  
Best Local Similarity 90.5%; Pred. No. 2.7e-07;  
Matches 19; Conservative 0; Mismatches 2; Indels 0;  
Gaps 0;  
QY 2 NTRKSERIQRGPRAFVTIGK 22  
DB 1 NTRKRIQRGPRAFVTIGK 21

RESULT 41  
US-08-482-810-25  
Sequence 25, Application US/08482810  
Patent No. 6080408  
GENERAL INFORMATION:  
APPLICANT: ROVINSKI, Benjamin  
APPLICANT: CAO, Shi-Xian  
APPLICANT: YAO, Fei-Long  
APPLICANT: PERSSON, Roy  
APPLICANT: KLEIN, Michel H  
TITLE OF INVENTION: RETROVIRUS-LIKE PARTICLES MADE NON-  
INFECTIOUS BY A PLURALITY OF MUTATIONS  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/482,810

FILING DATE: 07-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/292,967  
FILING DATE: 22-AUG-1994  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, Michael I  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-490 MIS:vg  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-482-810-25

Query Match 76.4%; Score 94; DB 3; Length 21;  
Best Local Similarity 90.5%; Pred. No. 2.7e-07;  
Matches 19; Conservative 0; Mismatches 2; Indels 0;  
Gaps 0;  
QY 2 NTRKSERIQRGPRAFVTIGK 22  
DB 1 NTRKRIQRGPRAFVTIGK 21

RESULT 42  
US-09-027-955-25  
Sequence 25, Application US/09027955  
Patent No. 6291157  
GENERAL INFORMATION:  
APPLICANT: ROVINSKI, Benjamin  
APPLICANT: CAO, Shi-Xian  
APPLICANT: YAO, Fei-Long  
APPLICANT: PERSSON, Roy  
APPLICANT: KLEIN, Michel H  
TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIOUS  
RETROVIRUS-LIKE PARTICLES  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: 6th Floor, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/027,955  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/290,105  
FILING DATE: 15-AUG-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, Michael I  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-798 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 amino acids  
TYPE: amino acid



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; STRANDEDNESS: single
; TOPOLOGY: linear
US-09-027-955-25

Query Match      76.4%; Score 94; DB 3; Length 21;
Best Local Similarity 90.5%; Pred. No. 2.7e-07;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2 NTRKSRIRIQGPGRAFTVIGK 22
Db 1 NTRKRIIRIQGPGRAFTVIGK 21

RESULT 43
US-09-636-805-25
; Sequence 25, Application US/09636805
; Patent No. 6342228
; GENERAL INFORMATION:
; APPLICANT: ROVINSKI, Benjamin
; CAO, Shi-Xian
; YAO, Fei-Long
; PERSSON, Roy
; KLEIN, Michel H
; TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIOUS
; RETROVIRUS-LIKE PARTICLES
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: 6th Floor, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5G 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/636,805
; FILING DATE: 10-Aug-2000
; CLASSIFICATION: <unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 09/027,955
; FILING DATE: 23-FEB-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, Michael I
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-1068 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 25:
US-09-636-805-25

Query Match      76.4%; Score 94; DB 3; Length 21;
Best Local Similarity 90.5%; Pred. No. 2.7e-07;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2 NTRKSRIRIQGPGRAFTVIGK 22
Db 1 NTRKRIIRIQGPGRAFTVIGK 21

RESULT 44
US-09-258-128-25
; Sequence 25, Application US/09258128
; Patent No. 6451322
; GENERAL INFORMATION:
; APPLICANT: ROVINSKI, Benjamin
; CAO, Shi-Xian
; YAO, Fei-Long
; PERSSON, Roy
; KLEIN, Michel H
; TITLE OF INVENTION: RETROVIRUS-LIKE PARTICLES MADE NON-
; INFECTIOUS BY A PLURALITY OF MUTATIONS
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: 6th Floor, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5G 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/258,128
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/292,967
; FILING DATE: 22-AUG-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, Michael I
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-924 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-09-258-128-25

Query Match      76.4%; Score 94; DB 4; Length 21;
Best Local Similarity 90.5%; Pred. No. 2.7e-07;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2 NTRKSRIRIQGPGRAFTVIGK 22
Db 1 NTRKRIIRIQGPGRAFTVIGK 21

RESULT 45
US-09-635-754-25
; Sequence 25, Application US/09635754
; Patent No. 6518030
; GENERAL INFORMATION:
; APPLICANT: ROVINSKI, Benjamin
; CAO, Shi-Xian
; YAO, Fei-Long
; PERSSON, Roy
; KLEIN, Michel H
; TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIOUS
; RETROVIRUS-LIKE PARTICLES
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: 6th Floor, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5G 1R7
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; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/635,754
; FILING DATE: 10-Aug-2000
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 09/027,955
; FILING DATE: 23-FEB-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, Michael I
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-1065 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 25:
US-09-635-754-25

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```

Query Match      76.4%; Score 94; DB 4; Length 21;
Best Local Similarity 90.5%; Pred. No. 2.7e-07;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY      2 NTRKSERIQGPGRAFTVIGK 22
Db      1 NTRKRIRIQGPGRAFTVIGK 21

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Search completed: May 16, 2005, 13:06:19  
Job time : 37.9231 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 16, 2005, 12:40:16 ; Search time 169.846 Seconds  
(without alignments)  
54.651 Million cell updates/sec

Title: US-08-869-386-3

Perfect score: 123

Sequence: 1 NNTKSERIQRGPGRAFTVIGKIG 24

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 768190

Minimum DB seq length: 0

Maximum DB seq length: 25

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : A\_Geneseq\_16Dec04:\*

- 1: Genesepq1980s:\*
- 2: Genesepq1990s:\*
- 3: Genesepq2000s:\*
- 4: Genesepq2001s:\*
- 5: Genesepq2002s:\*
- 6: Genesepq2003as:\*
- 7: Genesepq2003bs:\*
- 8: Genesepq2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

| Result No. | Score | Query Match | Length | DB ID      | Description        |
|------------|-------|-------------|--------|------------|--------------------|
| 1          | 115   | 93.5        | 24     | 2 AAR06211 | Aar06211 Immunosp  |
| 2          | 115   | 93.5        | 24     | 2 AAR07018 | Aar07018 Residues  |
| 3          | 115   | 93.5        | 24     | 2 AAR26565 | Aar26565 Sequence  |
| 4          | 115   | 93.5        | 24     | 2 AAR29233 | Aar29233 Heterocon |
| 5          | 115   | 93.5        | 24     | 2 AAR26870 | Aar26870 HIV gp120 |
| 6          | 115   | 93.5        | 24     | 2 AAR32406 | Aar32406 Sequence  |
| 7          | 115   | 93.5        | 24     | 2 AAR38165 | Aar38165 V3 loop p |
| 8          | 115   | 93.5        | 24     | 2 AAY22581 | Aay22581 HIV LDL b |
| 9          | 115   | 93.5        | 24     | 3 AAB15873 | Aab15873 Human che |
| 10         | 115   | 93.5        | 24     | 4 AAB68602 | Aab68602 HIV gp120 |
| 11         | 115   | 93.5        | 25     | 1 AAP90281 | Aap90281 Peptide 1 |
| 12         | 115   | 93.5        | 25     | 2 AAR08276 | Aar08276 HIV pepi  |
| 13         | 115   | 93.5        | 25     | 2 AAR31276 | Aar31276 HIV princ |
| 14         | 115   | 93.5        | 25     | 2 AAR30031 | Aar30031 HIV princ |
| 15         | 115   | 93.5        | 25     | 2 AAR26712 | Aar26712 HIV-PND-p |
| 16         | 115   | 93.5        | 25     | 2 AAR33222 | Aar33222 HIV gp120 |
| 17         | 115   | 93.5        | 25     | 2 AAR41336 | Aar41336 HIV gp120 |
| 18         | 115   | 93.5        | 25     | 2 AAR41330 | Aar41330 HIV gp120 |
| 19         | 113   | 91.9        | 25     | 2 AAR04427 | Aar04427 Human imm |
| 20         | 111   | 90.2        | 24     | 2 AAY22583 | Aay22583 HIV LDL b |
| 21         | 109   | 88.6        | 23     | 2 AAR04502 | Aar04502 Cpd. elic |
| 22         | 109   | 88.6        | 24     | 2 AAR33190 | Aar33190 Sequence  |
| 23         | 109   | 88.6        | 24     | 2 AAW67414 | Aaw67414 HIV-1 pep |
| 24         | 109   | 88.6        | 24     | 2 AAW98904 | Aaw98904 HIV-1 vac |
| 25         | 109   | 88.6        | 24     | 2 AAY39769 | Aay39769 HIV1 chlm |

## ALIGNMENTS

## RESULT 1

AAR06211  
ID AAR06211 standard; peptide; 24 AA.

AC AAR06211;

XX 10-DEC-1990 (first entry)

XX Immunosuppressant protease inhibitor.

XX Organ transplant; autoimmune disease; allergy; aplastic anaemia;  
systemic erythaematodes.

XX Synthetic.

XX JP02157229-A.

XX 18-JUN-1990.

XX 07-DEC-1988; 88JP-00310635.

XX 07-DEC-1988; 88JP-00310635.

XX (NITL) NITTO DENKO CORP.

XX WPI; 1990-233739/31.

PT Protease inhibiting peptide immuno-suppressant - used to suppress  
rejection reaction in organs transplantation.

XX Claim 1; Page 181; 6pp; Japanese.

CC Protease inhibitor may be used to suppress organ transplant rejection  
without serious side effects. It may also be used in prevention and  
therapy of allergy, aplastic anaemia and systemic erythaematodes. See  
also AAR06212

XX Sequence 24 AA;

Query Match 93.5%; Score 115; DB 2; Length 24;

Best Local Similarity 95.8%; Pred. No. 2.8e-09;

Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 NNTKSERIQRGPGRAFTVIGKIG 24

Db 1 NNTKSERIQRGPGRAFTVIGKIG 24

|    |     |      |    |   |          |          |           |
|----|-----|------|----|---|----------|----------|-----------|
| 26 | 109 | 88.6 | 25 | 2 | AAR15058 | Aar15058 | HIV-1 amp |
| 27 | 109 | 88.6 | 25 | 2 | AAR36587 | Aar36587 | Virus neu |
| 28 | 106 | 86.2 | 25 | 2 | AAR04475 | Aar04475 | Human imm |
| 29 | 105 | 85.4 | 25 | 2 | AAW87618 | Aaw87618 | Epitope o |
| 30 | 103 | 83.7 | 22 | 2 | AAR42153 | Aar42153 | gp120 V3  |
| 31 | 103 | 83.7 | 22 | 2 | AAW07392 | Aaw07392 | HIV-1 str |
| 32 | 103 | 83.7 | 22 | 2 | AAW07488 | Aaw07488 | HIV-1 str |
| 33 | 100 | 81.3 | 25 | 2 | AAR13120 | Aar13120 | Binding s |
| 34 | 100 | 81.3 | 25 | 2 | AAW72819 | Aaw72819 | HIV-1 gp1 |
| 35 | 99  | 80.5 | 22 | 3 | AAW85137 | Aay85137 | HIV-1 III |
| 36 | 94  | 76.4 | 20 | 2 | AAW76842 | Aaw76842 | Fusion im |
| 37 | 94  | 76.4 | 21 | 2 | AAR04060 | Aar04060 | Epitope c |
| 38 | 94  | 76.4 | 21 | 2 | AAR93073 | Aar93073 | Antigenic |
| 39 | 94  | 76.4 | 21 | 2 | AAW75478 | Aaw75478 | HIV-1 str |
| 40 | 94  | 76.4 | 21 | 2 | AAW16052 | Aay16052 | HIV-1 iso |
| 41 | 94  | 76.4 | 21 | 2 | AAW85568 | Aaw85568 | Human imm |
| 42 | 94  | 76.4 | 21 | 4 | AAU08699 | Aau08699 | Retroviru |
| 43 | 94  | 76.4 | 22 | 2 | AAR57470 | Aar57470 | HIV BRU V |
| 44 | 94  | 76.4 | 24 | 2 | AAE20149 | Aae20149 | Human imm |
| 45 | 94  | 76.4 | 25 | 2 | AAR63820 | Aar63820 | HIV-1 gp1 |

```

RESULT 2
AAR07018
ID AAR07018 standard; peptide; 24 AA.
AC
AC AAR07018;
XX
DT 24-OCT-2003 (revised)
DT 18-JAN-1991 (first entry)
XX
DE Residues 301-324 of HIV gp 120 protein used in isolation of sulphated
DE polysaccharide by affinity chromatography.
XX
KW HIV; AIDS; ARC; gp120; RP135.
XX
OS Human immunodeficiency virus 1.
XX
PN CA2007258-A.
XX
PD 11-JUL-1990.
XX
PF 05-JAN-1990; 90CA-02007258.
XX
PR 11-JAN-1989; 89US-00295856.
PR 05-JUL-1989; 89US-00375795.
XX
PA (RICH ) MERRELL DOW PHARM INC.
PI Cardin AD, Jackson RL;
XX
DR WPI; 1990-290631/39.
XX
PT Prepn. of anti-HIV sulphated polysaccharide - by affinity chromatography
PT using a resin-bound peptide corresp. to a HIV gp. 120 fragment.
XX
PS Disclosure; Page ?; 34pp; English.
XX
CC Anti-HIV sulphated polysaccharide (SPS) can prevent syncytium formation
CC in HIV infected C4 cells. SPS may be isolated by affinity chromatography
CC with the given resin bound peptide fragment RP135. (Updated on 24-OCT-
CC 2003 to standardise OS field)
XX
SQ Sequence 24 AA;
Query Match 93.5%; Score 115; DB 2; Length 24;
Best Local Similarity 95.8%; Pred. No. 2.8e-09;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 NNTKRSIRIQGPGRAFTVIGKIG 24
DB 1 NNTKRSIRIQGPGRAFTVIGKIG 24
||||| ||||||| ||||||| |||||||
1 NNTKRSIRIQGPGRAFTVIGKIG 24

RESULT 3
AAR26565
ID AAR26565 standard; peptide; 24 AA.
XX
AC AAR26565;
XX
DT 24-OCT-2003 (revised)
DT 25-MAR-2003 (revised)
DT 28-JAN-1993 (first entry)
XX
DE Sequence of peptide DB1 determined from the V3 principal neutralising
DE domain (PND) region of HIV-1 strain HTLV-III B.
XX
KW Diagnostic; assay; detection; AIDS; human immunodeficiency virus.
XX
OS Human immunodeficiency virus 1; strain HTLV-III B.
XX
PN WO9213882-A1.
XX
PD 20-AUG-1992.
XX

RESULT 4
AAR29233
ID AAR29233 standard; peptide; 24 AA.
XX
AC AAR29233;
XX
DT 25-MAR-2003 (revised)
DT 14-APR-1993 (first entry)
XX
DE Heteroconjugate antibody immunogen RP135 (IIIB).
XX
KW V3 loop; gp41; envelope protein; MN; prototype; virus; variant; HIV;
KW homology; heteroconjugate; enzyme; epitope mapping; replication;
KW conjugate; immunogenic carrier; keyhole limpet hemocyanin; KLH;
KW ovalbumin; succinyl maleimidomethyl cyclohexanylethyl carbonylate; SMCC.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-difference 24 /note= "Not in the natural sequence of this isolate"
FT FT
PN WO9220373-A1.
XX
PD 26-NOV-1992.
XX
PF 29-APR-1992; 92WO-US003616.
XX
PR 14-MAY-1991; 91US-00699773.
XX
PA (REPK ) REPLIGEN CORP.
XX

```

PI Higgins PJ, Potts BJ;  
 DR WPI; 1992-415475/50.  
 XX  
 PT Hetero-conjugate antibodies for treating HIV infections - comprise an  
 PT antibody specific for an effector cell surface antigen and an antibody to  
 PT a V3 loop of gp-120 envelope protein of HIV.  
 XX  
 PS Disclosure; Page 19; 69pp; English.  
 XX  
 CC The sequences given in AAR29226-35 represent peptides which were used as  
 CC immunogens for the production of antibodies against HIV. These peptides  
 CC may be either unconjugated or conjugated to an immunogenic carrier, eg. a  
 CC keyhole limpet hemocyanin (KLH) or ovalbumin, using succinyl  
 CC maleimidomethyl cyclohexanecarboxylate (SMCC) as a conjugating agent.  
 CC Viruses containing these or similar sequences may be recognised by the  
 CC heteroconjugate enzymes of the invention. The antibodies raised against  
 CC these sequences may be identified by standard epitope mapping techniques.  
 CC These antibodies are capable, even at low concentrations, of nearly  
 CC eliminating viral replication of different strains of HIV. (Updated on 25  
 CC -MAR-2003 to correct PN field.)  
 XX  
 SQ Sequence 24 AA;  
 Query Match 93.5%; Score 115; DB 2; Length 24;  
 Best Local Similarity 95.8%; Pred. No. 2.8e-09;  
 Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 NNTKSRIRIQGPGRAFTVIGKIG 24  
 DB 1 NNTKSRIRIQGPGRAFTVIGKIG 24  
 RESULT 5  
 ID AAR26870 standard; peptide; 24 AA.  
 XX  
 AC AAR26870;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 20-MAY-1998 (first entry)  
 XX  
 DE HIV gp120 V3 region binding assay peptide IIIB.  
 XX  
 KW Human immunodeficiency virus; AIDS; anti-gp120 antibodies.  
 OS Synthetic.  
 XX  
 PN EP503916-A1.  
 XX  
 PD 16-SEP-1992.  
 XX  
 PF 11-MAR-1992; 92EP-00302064.  
 XX  
 PR 11-MAR-1991; 91US-00668266.  
 PR 06-MAR-1992; 92US-00894766.  
 XX  
 PA (IDEC-) IDEC PHARM CORP.  
 XX  
 PI Chang-Yuil K;  
 XX  
 DR WPI; 1992-309988/38.  
 XX  
 PT Anti-idiotype antibodies and methods for their selection - useful as  
 PT vaccines for the prevention and treatment of HIV infection.  
 XX  
 PS Example; Page 9; 30pp; Japanese.  
 XX  
 CC The sequence is that of peptide IIIB, derived from the V3 region of HIV  
 CC gp120, it was used in binding assays for anti-gp120 antibodies. The anti-  
 CC gp120 antibodies are useful in vaccine formulations for the treatment or  
 CC prevention of HIV infection. See also AAR26867-R26873. (Updated on 25-MAR  
 CC -2003 to correct PN field.) (Updated on 25-MAR-2003 to correct PR field.)

XX  
 SQ Sequence 24 AA;  
 Query Match 93.5%; Score 115; DB 2; Length 24;  
 Best Local Similarity 95.8%; Pred. No. 2.8e-09;  
 Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 NNTKSRIRIQGPGRAFTVIGKIG 24  
 DB 1 NNTKSRIRIQGPGRAFTVIGKIG 24  
 RESULT 6  
 ID AAR32406 standard; peptide; 24 AA.  
 XX  
 AC AAR32406;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 04-JUL-1993 (first entry)  
 XX  
 DE Sequence of peptide B1 which comprises AAs 308-331 from the V3 region of  
 DE HIV-1 isolate IIIB.  
 XX  
 KW HIV-1; vaccine; dendritic core; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9303766-A1.  
 XX  
 PD 04-MAR-1993.  
 XX  
 PF 11-AUG-1992; 92WO-US006688.  
 XX  
 PR 13-AUG-1991; 91US-00744281.  
 XX  
 PA (REPK ) REPLIGEN CORP.  
 PA (UYRQ ) UNIV ROCKEFELLER.  
 XX  
 PI Tam JP, Profy AT;  
 XX  
 DR WPI; 1993-093730/11.  
 XX  
 PT New multiple antigen peptide(s) as HIV vaccines - include a dendritic  
 PT core covalently bonded to peptide including the sequence IGPGR.  
 XX  
 PS Example; Fig 1; 35pp; English.  
 XX  
 CC Nine peptides from the V3 regions of HIV-1 isolates IIIB, RF and MN were  
 CC incorporated into tetraivalent multiple antigen peptide systems (MAPS)  
 CC (see AAR32406-14). Parallel groups of three peptides with chain lengths  
 CC spanning from 11-24 residues were synthesised in MAPS format for each  
 CC isolate. ELIS assays demonstrated that antisera titers in mice were  
 CC closely related to the length of the IIIB peptide used for the  
 CC immunisation - the longer the stronger the response. There was no  
 CC substantial antibody prodn. in mice against the other two series of  
 CC peptides, RF (B4-B6), and MN (B7-B9), except for a low reactivity in the  
 CC gp. immunised with B8 (MN isolate). Specificity tests of the B cell  
 CC response demonstrated that the T cell epitope (AAR32415) also serves as a  
 CC B cell epitope. (Updated on 25-MAR-2003 to correct PN field.)  
 XX  
 SQ Sequence 24 AA;  
 Query Match 93.5%; Score 115; DB 2; Length 24;  
 Best Local Similarity 95.8%; Pred. No. 2.8e-09;  
 Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 NNTKSRIRIQGPGRAFTVIGKIG 24  
 DB 1 NNTKSRIRIQGPGRAFTVIGKIG 24  
 RESULT 7

AAR38165  
ID AAR38165 standard; peptide; 24 AA.  
XX  
AC AAR38165;  
XX  
DT 27-AUG-2003 (revised)  
DT 25-MAR-2003 (revised)  
DT 12-OCT-1993 (first entry)  
XX  
DE V3 loop peptide N24G.  
XX  
KW gp120; HIV-1; cytotoxic T-lymphocyte; CTL; T-helper; AIDS; infection.  
KW  
OS Human immunodeficiency virus 1.  
PN  
PN WO9310816-A1.  
XX  
PD 10-JUN-1993.  
XX  
PF 02-DEC-1992; 92WO-US010378.  
XX  
PR 02-DEC-1991; 91US-00800932.  
PR 16-SEP-1992; 92US-00945865.  
XX  
PA (TEXA ) UNIV TEXAS SYSTEM.  
XX  
PI Sastry JK, Arlinghaus RB, Platsoucas CD, Nehete PN;  
XX  
DR WPI; 1993-196739/34.  
XX  
PT Peptide composition for treating and preventing viral infections -  
PT comprise CTL-inducing epitope and HIV infection-inhibiting sequence or T  
PT helper cell-inducing sequence.  
XX  
PS Claim 19; Page 95; 130pp; English.  
XX  
CC HIV gp120 V3 loop-derived peptides (AAR38170-87) are successful in  
CC generating CTL responses, esp. peptide R15K (AAR38187); the T-helper cell  
CC -inducing peptide includes the sequence C19A (AAR38164); HIV infection-  
CC inhibiting peptides are given in AAR38188-206, and are esp. peptides  
CC R15K, N24G, E13V, R8K, R13Q and H13N (AAR38165-69). The peptides may also  
CC be derived from an influenza virus protein or a sendai virus protein  
CC (AAR41014-15). It was observed that peptide N24G (amino acids 308-311),  
CC with sequences derived from the V3 loop of HIV-1 IIIB, inhibits HIV-1  
CC infection of primary human T cells by 92% at 1 microg/ml (ca. 0.4-0.6  
CC microm). (Updated on 25-MAR-2003 to correct PN field.) (Updated on 27-AUG  
CC -2003 to correct OS field.)  
XX  
SQ Sequence 24 AA;

Query Match 93.5%; Score 115; DB 2; Length 24;  
Best Local Similarity 95.8%; Pred. No. 2.8e-09;  
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 NNTKSERIQRGPGRAFTVIGKIG 24  
||||| ||||||| ||||||| ||||||| |||||||  
Db 1 NNTKSIIRIQRGPGRAFTVIGKIG 24

RESULT 8  
AAY22581  
ID AAY22581 standard; peptide; 24 AA.  
XX  
AC AAY22581;  
XX  
DT 17-OCT-2003 (revised)  
DT 19-OCT-1999 (first entry)  
XX  
DE HIV LDL binding peptide, sequence A.  
XX  
KW HIV; LDL; low density lipoprotein; human; immune response; infection;  
KW immunodeficiency; neoplastic tissue; myalgic encephalomyelitis; ME;  
KW viral infection fatigue syndrome; tuberculosis; hepatitis; AIDS; ARC;

KW acquired immunodeficiency syndrome; AIDS related complex;  
KW HIV-infected CD4 cell; immunosuppressive peptide.  
OS Human immunodeficiency virus 1.  
XX  
PN WO9938524-A2.  
XX  
PD 05-AUG-1999.  
XX  
PF 28-JAN-1999; 99WO-IB000149.  
XX  
PR 29-JAN-1998; 98US-0072980P.  
XX  
PA (PREN/) PRENDERGAST P T.  
PI Prendergast PT;  
XX  
DR WPI; 1999-494040/41.  
XX  
PT Enhancing the immune response using a recombinant human low-density  
PT lipoprotein receptor, useful for treating viral infections, especially  
XX human immunodeficiency virus (HIV) infection.  
PS Claim 7; Page 19; 24pp; English.  
XX  
CC This sequence represents a HIV sequence that binds human low density  
CC lipoprotein (LDL), and is designated sequence "A". The invention relates  
CC to a method for enhancing the immune response in a patient with a  
CC condition, selected from immunodeficiency (due to a viral, bacterial,  
CC mycoplasmic, fungal or parasitic infection, or from the growth of  
CC neoplastic tissue), myalgic encephalomyelitis (ME), post inoculation or  
CC viral infection fatigue syndrome, tuberculosis, or hepatitis. The method  
CC comprises using a pharmaceutical composition, comprising a recombinant  
CC human LDL receptor or a mimic molecule to the cysteine rich domain of LDL  
CC receptor. The human recombinant LDL receptor forms pharmaceutical  
CC compositions for: the treatment of acquired immunodeficiency syndrome  
CC (AIDS) or ARC (AIDS related complex); reducing syncytium formation in HIV  
CC -infected CD4 cells; treating blood or body fluid or organs to  
CC neutralise/remove immunosuppressive peptides and/or viruses; or treating  
CC hepatitis A, B or C. The pharmaceutical compositions also treat a viral  
CC infection in a human or animal host. The human recombinant LDL receptor  
CC is also useful for manufacturing medicaments for treating all the  
CC conditions given above. The human recombinant LDL receptor is a highly  
CC specific inhibitor of HIV-1 replication in vitro. (Updated on 17-OCT-2003  
XX to standardise OS field)  
SQ Sequence 24 AA;

Query Match 93.5%; Score 115; DB 2; Length 24;  
Best Local Similarity 95.8%; Pred. No. 2.8e-09;  
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 NNTKSERIQRGPGRAFTVIGKIG 24  
||||| ||||||| ||||||| ||||||| |||||||  
Db 1 NNTKSIIRIQRGPGRAFTVIGKIG 24

RESULT 9  
AAB15873  
ID AAB15873 standard; peptide; 24 AA.  
XX  
AC AAB15873;  
XX  
DT 17-JAN-2001 (first entry)  
XX  
DE Human chemokine derived peptide #25.  
XX  
KW Macrophage recruitment; chemokine derivative; MCP-1; osteoporosis;  
KW monocyte chemoattractant protein-1; inflammation; atherosclerosis; HIV;  
KW AIDS; stroke; psoriasis; autoimmune disease; hypertension; endotoxaemia;  
KW basophil-mediated disease; myocardial infarction; acute ischaemia;  
KW rheumatoid arthritis; contraception.

|           |   |
|-----------|---|
| OS        | Synthetic.  |
| XX        | WO2000042071-A2.  |
| XX        |   |
| XX        | 20-JUL-2000.  |
| XX        |   |
| XX        | 12-JAN-2000; 2000WO-US000821.   |
| XX        |   |
| XX        | 12-JAN-1999; 99US-00229071.   |
| PR        | 17-MAR-1999; 99US-00271192.   |
| XX        | 01-DEC-1999; 99US-00452406.   |
| XX        |   |
| PA        | (NEOR-) NEORX CORP.   |
| XX        |   |
| XX        | Grainger DJ, Tatalick LM;   |
| XX        | WPI; 2000-499101/44.  |
| DR        |   |
| XX        |   |
| XX        | New peptide 3, amide and heterocyclic compounds and saccharide conjugates |
| PT        | used for inhibiting chemokine induced activity and for treating e.g.      |
| PT        | stroke, vascular diseases, autoimmune diseases and tumor growth.          |
| XX        |   |
| XX        | Disclosure; Fig 18; 387pp; English.                                       |
| PS        |   |
| XX        |   |
| CC        | The present invention concerns the identification of a number of          |
| CC        | chemokines which can be used to produce derivatives, agonists and         |
| CC        | antagonists which are then useful in disease treatment. The chemokines    |
| CC        | include sequences AAB15785-B15794, AAB15803-B15813 and AAB15831-B15848.   |
| CC        | These chemokine derivatives can be used to treat diseases such as         |
| CC        | autoimmune diseases, atherosclerosis, osteoporosis, HIV infection and     |
| CC        | AIDS, psoriasis, inflammatory diseases, hypertension, basophil-mediated   |
| CC        | diseases, endotoxaemia, myocardial infarction, acute ischaemia and        |
| CC        | rheumatoid arthritis, and can be used to prevent strokes and as           |
| CC        | contraceptives. The coding sequences for the chemokines can be used in    |
| CC        | gene therapy for the same diseases, as well as in the production of       |
| CC        | animal models   |
| XX        |   |
| SQ        | Sequence 24 AA;   |
|           |   |
|           | Query Match 93.5%; Score 115; DB 3; Length 24;                            |
|           | Best Local Similarity 95.8%; Pred.No. 2.8e-09;                            |
|           | Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0                |
|           |   |
| Qy        | 1 NNTRKSERIQRGPGRAFTVIGKIG 24   |
|           |   |
| Db        | 1 NNTRKSIRIQRGPGRAFTVIGKIG 24   |
|           |   |
|           |   |
| RESULT 10 |   |
| AAB68602  |   |
| ID        | AAB68602 standard; peptide; 24 AA.  |
| AC        | AAB68602;   |
| XX        |   |
| XX        | 11-SEP-2003 (revised)   |
| DT        | 25-APR-2001 (first entry)   |
| XX        |   |
| XX        |   |
| DE        | HIV gp120 V3 loop peptide #2.   |
| XX        |   |
| XX        | HIV gp120 V3 loop; liposome composition; HIV infection.                   |
| KW        |   |
| XX        |   |
| OS        | Human immunodeficiency virus 1.   |
| XX        |   |
| XX        | US6180134-B1.   |
| XX        |   |
| XX        | 30-JAN-2001.  |
| PD        |   |
| XX        |   |
| XX        | 07-JUN-1995; 95US-00480332.   |
| PF        |   |
| XX        |   |
| XX        | 23-MAR-1993; 93US-00035443.   |
| PR        | 29-SEP-1994; 94US-00316436.   |
| XX        |   |
| XX        | (SEOU-) SEQUUS PHARM INC.   |
| PA        |   |

PT New HIV proteins and peptide(s) - used in diagnosis, prophylaxis or  
PT therapy of AIDS, esp. for prepn. of vaccines against HIV infection.  
XX  
XX PS  
XX Claim 1; Page 27; 29pp; English.  
XX  
CC Protein derivative stimulates a lymphocyte proliferative response in HIV-  
CC infected humans, providing a means of diagnosis, protection and  
CC therapeutic value. (Updated on 25-MAR-2003 to correct PR field.) (Updated  
CC on 25-MAR-2003 to correct PA field.) (Updated on 24-OCT-2003 to  
CC standardise OS field)  
CC  
CC Revised record issued on 09-SEP-2004 : Correction to location  
XX  
XX Sequence 25 AA;  
SQ  
Query Match 93.5%; Score 115; DB 1; Length 25;  
Best Local Similarity 95.8%; Pred. No. 3e-09; Indels 0; Gaps 0;  
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1 NNTKSERIQRGPGRAFTVIGKIG 24  
DB 1 NNTKSERIQRGPGRAFTVIGKIG 24  
RESULT 12  
AAR08276  
ID AAR08276 standard; protein; 25 AA.  
XX  
XX AC AAR08276;  
XX  
XX DT 07-MAR-1991 (first entry)  
XX  
XX DE HIV peptide fragment (IIIB isolate).  
XX  
XX KW AIDS; ARC; conjugate immunogen; Neisseria outer membrane protein;  
XX HIV major neutralisation determinant.  
XX  
XX OS Human immunodeficiency virus.  
XX  
XX PI EP402088-A.  
XX  
XX PN 12-DEC-1990.  
XX  
XX PF 05-JUN-1990; 90EP-00306082.  
XX  
XX PR 06-JUN-1989; 89US-00362176.  
XX PR 06-JUN-1989; 89US-00362177.  
XX PR 06-JUN-1989; 89US-00362178.  
XX PR 06-JUN-1989; 89US-00362179.  
XX  
XX PA (MERI ) MERCK & CO INC.  
XX  
XX PI Emini EA, Marburg S, Scolnick EM, Larson VM;  
XX  
XX DR WPI; 1990-370100/50.  
XX  
XX Conjugate immunogen for AIDS and ARC treatment - composed of neutralising  
XX determinant of HIV and Neisseria outer membrane.  
XX  
XX PS Claim 2; Page 22; 24pp; English.  
XX  
XX CC This peptide is derived from the HIV IIIB isolate and is cross- reactive  
XX with the HIV major neutralisation determinant (MNTD). This MNTD is used  
XX in a conjugate, covalently linked to the outer membrane protein (Omp)  
XX from Neisseria, as an immunogen for vaccination against AIDS. A cocktail  
XX of different MNTD poly- peptides can be used. See also AAR08274-75 and  
XX AAR08277  
XX  
XX Sequence 25 AA;  
SQ  
Query Match 93.5%; Score 115; DB 2; Length 25;  
Best Local Similarity 95.8%; Pred. No. 3e-09; Indels 0; Gaps 0;  
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 NNTKSERIQRGPGRAFTVIGKIG 24  
DB 1 NNTKSERIQRGPGRAFTVIGKIG 24  
RESULT 13  
AAR31276  
ID AAR31276 standard; peptide; 25 AA.  
XX  
XX AC AAR31276;  
XX  
XX DT 12-FEB-1993 (first entry)  
XX  
XX DE HIV principal determinant peptide.  
XX  
XX KW AIDS; ARC; human immunodeficiency virus; vaccine; Neisseria;  
XX meningitidis b; outer membrane protein complex; OMPC; PND135.  
XX  
XX OS Synthetic.  
XX  
XX FH Key Location/Qualifiers  
XX Modified-site 1 /note= "bonds to the OMPC of the conjugate via this site"  
XX  
XX PN EP467700-A.  
XX  
XX PD 22-JAN-1992.  
XX  
XX PF 19-JUL-1991; 91EP-00306598.  
XX  
XX PR 19-JUL-1990; 90US-00555339.  
XX PR 19-JUL-1990; 90US-00555966.  
XX PR 19-JUN-1991; 91US-00715276.  
XX PR 19-JUN-1991; 91US-00715278.  
XX  
XX PA (MERI ) MERCK & CO INC.  
XX  
XX PI Leanza WJ, Marburg S, Tolman RL, Emini EA;  
XX  
XX DR WPI; 1992-026505/04.  
XX  
XX Conjugate proteins comprising HIV peptide components - useful for  
XX preparing vaccines for e.g. AIDS or for treating infections.  
XX  
XX PS Claim 12; Page 56; 63pp; English.  
XX  
XX CC The invention relates to a co-conjugate comprising an immunogenic protein  
XX or protein complex having a first set of covalent linkages to low  
XX molecular weight moieties which have an anionic or polyanionic character  
XX at physiological pH, and a second set of covalent linkages to peptides  
XX comprising HIV principal neutralizing determinants (PND's) or  
XX immunologically equivalent peptides. Preferably at least one set of the  
XX covalent linkages is comprised of maleimide derivatives; the  
XX (poly)anionic moiety is composed of one to five residues of the anionic  
XX form of a carboxylic, sulphonic or phosphonic acid; the immunogenic  
XX protein is the outer membrane protein complex (OMPC) of Neisseria  
XX meningitidis b; and the PND peptide has a linear structure, a disulphide-  
XX bonded cyclic structure, an amide-bonded cyclic structure or a thioether-  
XX bonded cyclic structure. The present sequence (PND135) is an example of a  
XX PND peptide component used in the co-conjugate. The co-conjugate is  
XX useful for inducing anti-peptide immune response in mammals, for inducing  
XX HIV-neutralizing antibodies in mammals, for formulating vaccines to  
XX prevent HIV infection or disease, including AIDS, or for treating humans  
XX afflicted with HIV infection or disease  
XX  
XX SQ Sequence 25 AA;  
Query Match 93.5%; Score 115; DB 2; Length 25;  
Best Local Similarity 95.8%; Pred. No. 3e-09;  
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1 NNTKSERIQRGPGRAFTVIGKIG 24





XX PN WO9304693-A1.  
 XX PD 18-MAR-1993.  
 XX PF 02-SEP-1992; 92WO-US007511.  
 XX PR 09-SEP-1991; 91US-00756677.  
 XX PR 20-JUL-1992; 92US-00916542.  
 XX PA (REPK ) REPLIGEN CORP.  
 XX PI Potts BJ, Whiteschaf ME, Field KG, Herlihy WC;  
 XX PR WPI; 1993-100653/12.  
 XX PT Synergistic compn. for treating HIV-1 infection - comprises antibody to  
 PT V3 loop of GP120 and antibody to CD4 binding site of GP120 or soluble CD4  
 PT polypeptide.  
 XX PS Example; Page 12; 56pp; English.  
 XX CC The sequence is that of peptide RPI35 (IIIB) used as an immunogen for the  
 CC generation of antibodies directed against the V3 loop of HIV gp120. These  
 CC antibodies can be used as part of a compen. with antibodies directed  
 CC against the CD4 binding site of gp120. The antibodies act synergistically  
 CC to neutralise HIV-1 in the treatment of HIV infection caused by different  
 CC strains. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 25-MAR  
 CC -2003 to correct PI field.)  
 XX SQ Sequence 25 AA;  
 Query Match 93.5%; Score 115; DB 2; Length 25;  
 Best Local Similarity 95.8%; Pred. No. 3e-09;  
 Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 NNTKRSRIQRGPGRAFTVIGKIG 24  
 Db ||||| ||||| ||||| ||||| |||||  
 1 NNTKRSRIQRGPGRAFTVIGKIG 24  
 RESULT 17  
 AAR41336  
 ID AAR41336 standard; peptide; 25 AA.  
 AC AAR41336;  
 XX 24-OCT-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 22-APR-1994 (first entry)  
 XX HIV gp120 V3 region peptide HIV-III B.  
 DE V3 region; HIV; envelope gp120; vaccine; human; humoral response;  
 KW cellular immunity; carrier protein; human serum albumin; HSA;  
 KW keyhole limpet haemocyanin; KLH; multiple antigen peptide.  
 XX Human immunodeficiency virus 1.  
 OS  
 XX WO9318791-A1.  
 XX 30-SEP-1993.  
 XX 19-MAR-1993; 93WO-JP000327.  
 XX 26-MAR-1992; 92JP-00098602.  
 PR 14-AUG-1992; 92JP-00237648.  
 PR 15-MAR-1993; 93JP-00054239.  
 XX (TSDT-) TSD KK.  
 PA  
 XX Okuda K;  
 XX

DR WPI; 1993-320455/40.  
 XX Virus for prevention of HIV infected diseases - comprising several  
 PT peptide(s) consisting of V3 region peptide of envelope Gp., 120, etc. and  
 PT complex including carrier protein.  
 XX Disclosure; Page 3; 35pp; Japanese.  
 XX The sequences given in AAR41336-39 and AAR42664 represent peptides  
 CC derived from the V3 region of HIV envelope gp120. These peptides may be  
 CC used in a vaccine which is effective in humans and animals and activates  
 CC humoral and cellular immunity. The vaccine also contains a carrier  
 CC protein containing a cysteine group, eg. human serum albumin (HSA),  
 CC keyhole limpet haemocyanin (KLH) or multiple antigen peptide. (Updated on  
 CC 25-MAR-2003 to correct PN field.) (Updated on 24-OCT-2003 to standardise  
 CC OS field)  
 XX SQ Sequence 25 AA;  
 Query Match 93.5%; Score 115; DB 2; Length 25;  
 Best Local Similarity 95.8%; Pred. No. 3e-09;  
 Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 NNTKRSRIQRGPGRAFTVIGKIG 24  
 Db ||||| ||||| ||||| ||||| |||||  
 1 NNTKRSRIQRGPGRAFTVIGKIG 24  
 RESULT 18  
 AAR41330  
 ID AAR41330 standard; peptide; 25 AA.  
 XX AAR41330;  
 XX 25-MAR-2003 (revised)  
 DT 21-APR-1994 (first entry)  
 XX HIV gp120 epitope.  
 DE HIV; haemagglutinin; reactants; catalysts; cofactors; repressors;  
 KW enhancers; hormones; binders; human immunodeficiency virus.  
 XX Human immunodeficiency virus.  
 OS  
 XX WO9319170-A1.  
 XX 30-SEP-1993.  
 XX 09-MAR-1993; 93WO-US002349.  
 XX 16-MAR-1992; 92US-00852412.  
 XX (WOHL/) WOHLSTADTER J N.  
 XX Wohlstadter JN;  
 XX WPI; 1993-320737/40.  
 XX Obtaining a novel mol. - capable of a desired interaction with a  
 PT substrate of interest and a selection molecule expressed by the host.  
 XX Claim 151; Page 147; 165pp; English.  
 XX The HIV gp120 epitope is used to isolate, create or evolve novel mols.  
 CC including (in)organic and biomolecules such as proteins, peptides,  
 CC nucleic acids, oligonucleotides, lipids, and polysaccharides for use as  
 CC reactants, catalysts, enzymatic cofactors, repressors, enhancers,  
 CC hormones and binders for a wide variety of substrates in industrial and  
 CC therapeutic products. This epitope was isolated from variable region 3 of  
 CC HIV gp120 (amino acids 271-295). (Updated on 25-MAR-2003 to correct PN  
 CC field.)  
 XX SQ Sequence 25 AA;

Query Match 93.5%; Score 115; DB 2; Length 25;  
 Best Local Similarity 95.8%; Pred. No. 3e-09;  
 Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 NNTKSERIQGPGRAFTVIGKIG 24  
 DB 1 NNTKSERIQGPGRAFTVIGKIG 24

RESULT 19  
 AAR04427  
 ID AAR04427 standard; peptide; 25 AA.  
 XX AC AAR04427;  
 XX 09-SEP-2004 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 20-SEP-1990 (first entry)  
 XX Human immunodeficiency virus peptide 135.  
 DE HIV-IIIB; peptide 135; principal neutralising domain; antibodies;  
 KW diagnosis; prophylaxis; therapy; AIDS.  
 XX Synthetic.  
 OS WO9003984-A.  
 XX 19-APR-1990.  
 PD 03-OCT-1988; 88US-00252949.  
 PF 03-OCT-1988; 88US-00252949.  
 PR 01-JUN-1989; 89US-00359543.  
 PR 19-SEP-1989; 89US-00407663.  
 XX (REPK ) REPLIGEN CORP.  
 FA Rusche JR, Putney SD, Javaherian K, Farley J, Grimalia R;  
 PI Lynn DU, Petrobre J;  
 XX WPI; 1990-147824/19.  
 DR Principal neutralising domain of HIV variants - used for producing  
 PT peptide(s) and antibodies for diagnosis, prophylaxis and/or therapy  
 PT therapy therapy of HIV infection.  
 XX Claim 8 (30); Page 75; 108pp; English.  
 XX Peptide 135 comprises segments of the Principal Neutralising Domain  
 CC (envelope protein) from isolate HIV-IIIB. The last Cys residue is added  
 CC for the purpose of crosslinking to carrier proteins. Cysteine residues  
 CC can be added so that that residues at or near both ends form a disulfide  
 CC bond, thus giving the peptide a loop-like configuration, which is  
 CC utilised to enhance the immunogenic properties of the peptide. The  
 CC peptide is capable of eliciting, and/or binding with, neutralising  
 CC antibodies. The neutralising domain is bounded by cysteine residues which  
 CC occur at positions 296 and 331. Peptides can be used as immunogens or  
 CC screening reagents to generate or identify poly- or Mabs. See also  
 CC AAR04427-804506 and AAR04273-004279. (Updated on 25-MAR-2003 to correct  
 CC PR field.) (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-  
 CC MAR-2003 to correct PI field.)  
 CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key  
 XX Sequence 25 AA;  
 SQ

Query Match 91.9%; Score 113; DB 2; Length 25;  
 Best Local Similarity 91.7%; Pred. No. 5.7e-09;  
 Matches 22; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 1 NNTKSERIQGPGRAFTVIGKIG 24

RESULT 20  
 AAY22583  
 ID AAY22583 standard; peptide; 24 AA.  
 XX AC AAY22583;  
 XX 17-OCT-2003 (revised)  
 DT 19-OCT-1999 (first entry)  
 XX HIV LDL binding peptide, sequence "A" variant.  
 DE HIV; LDL; low density lipoprotein; human; immune response; infection;  
 KW immunodeficiency; neoplastic tissue; myalgic encephalomyelitis; ME;  
 KW viral infection fatigue syndrome; tuberculosis; hepatitis; AIDS; ARC;  
 KW acquired immunodeficiency syndrome; AIDS related complex;  
 KW HIV-infected CD4 cell; immunosuppressive peptide.  
 XX Human immunodeficiency virus 1.  
 OS WO9938524-A2.  
 XX 05-AUG-1999.  
 PD 28-JAN-1999; 99WO-IB000149.  
 PF 29-JAN-1998; 98US-0072980P.  
 PR (PREN/) PRENDERGAST P T.  
 XX Prendergast PT;  
 PI WPI; 1999-494040/41.  
 XX Enhancing the immune response using a recombinant human low-density  
 PT lipoprotein receptor, useful for treating viral infections, especially  
 PT human immunodeficiency virus (HIV) infection.  
 XX Disclosure; Page 12; 24pp; English.  
 XX This sequence represents a variant of the HIV sequence that binds human  
 CC low density lipoprotein (LDL), and is designated sequence "A" (see  
 CC AAY22581). The sequence "A" peptide is isolated from HIV isolate  
 CC IIIB(BH10), and this sequence was isolated from HIV isolate IIIB(BH8).  
 CC The invention relates to a method for enhancing the immune response in a  
 CC patient with a condition, selected from immunodeficiency (due to a viral,  
 CC bacterial, mycoplasmic, fungal or parasitic infection, or from the growth  
 CC of neoplastic tissue), myalgic encephalomyelitis (ME), post inoculation  
 CC or viral infection fatigue syndrome, tuberculosis, or hepatitis. The  
 CC method comprises using a pharmaceutical composition, comprising a  
 CC recombinant human LDL receptor or a mimic molecule to the cysteine rich  
 CC domain of LDL receptor. The human recombinant LDL receptor forms  
 CC pharmaceutical compositions for: the treatment of acquired  
 CC immunodeficiency syndrome (AIDS) or ARC (AIDS related complex); reducing  
 CC syncytium formation in HIV-infected CD4 cells; treating blood or body  
 CC fluid or organs to neutralise/remove immunosuppressive peptides and/or  
 CC viruses; or treating hepatitis A, B or C. The pharmaceutical compositions  
 CC also treat a viral infection in a human or animal host. The human  
 CC recombinant LDL receptor is also useful for manufacturing medicaments for  
 CC treating all the conditions given above. The human recombinant LDL  
 CC receptor is a highly specific inhibitor of HIV-1 replication in vitro.  
 CC (Updated on 17-OCT-2003 to standardise OS field)  
 XX Sequence 24 AA;  
 SQ

Query Match 90.2%; Score 111; DB 2; Length 24;  
 Best Local Similarity 91.7%; Pred. No. 1.1e-08;  
 Matches 22; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 NNTKSERIQGPGRAFTVIGKIG 24



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PA (CONN-) CONNAUGHT LAB LTD.
XX
PI Chong P, Klein MH, Sia CDY;
XX
DR WPI; 1998-556461/47.
XX
XX Synthetic human immunodeficiency virus-1 peptide(s) - containing T-cell
PT epitope and B-cell epitope(s) are candidate vaccines against HIV-1.
XX
XX Disclosure; Fig 3; 40pp; English.
XX
XX The invention relates to a novel immunogenic composition for use in
CC vaccines for the treatment of HIV-1 comprising an HIV-1-derived T-cell
CC epitope linked to an HIV-1-derived B-cell epitope. The T-cell epitopes
CC are generally designed based on the p24 core protein and the B-cell
CC epitopes from the V3 loop of the gp120 protein from various HIV-1
CC strains. This sequence corresponds to an HIV-1 B-cell peptide epitope
CC used to immunise a guinea pig
XX
SQ Sequence 24 AA;

Query Match 88.6%; Score 109; DB 2; Length 24;
Best Local Similarity 95.7%; Pred. No. 2.1e-08;
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2 NTRKSERIQRGPGRAFTVIGKIG 24
Db 1 NTRKSIRIQRGPGRAFTVIGKIG 23

RESULT 24
AAW98904
ID AAW98904 standard; peptide; 24 AA.
XX
AC AAW98904;
XX
XX 05-MAY-1999 (first entry)
XX
XX HIV-1 vaccine synthetic peptide SEQ ID NO:99.
XX
XX HIV-1; human immunodeficiency virus; vaccine; T-cell epitope;
KW gag protein; B-cell epitope; gp41 protein; chimeric; infection.
XX
XX Synthetic.
OS Human immunodeficiency virus 1.
XX
XX US5876731-A.
XX
XX 02-MAR-1999.
XX
XX 05-JUN-1995; 95US-00462507.
XX
XX 09-JUN-1993; 93US-00073378.
PR 09-JUN-1994; 94US-00257528.
XX
XX (CONN-) CONNAUGHT LAB LTD.
XX
XX Chong P, Klein MH, Sia CDY;
XX
XX WPI; 1999-189590/16.
XX
XX Synthetic chimeric HIV polypeptides - comprising gag protein T-cell
PT epitope linked to gp41 B-cell epitope.
XX
XX Example 1; Col 71-72; 41pp; English.
XX
XX The present invention describes a synthetic peptide comprising an amino
CC acid sequence containing a T-cell epitope of an HIV gag protein linked at
CC its C terminus to an amino acid sequence containing a B-cell epitope of
CC an HIV gp41 protein and containing the amino acid sequence: XILKDWX2;
CC where X1 = E, A, G or Q, and X2 = A or T, or an amino acid sequence
CC capable of eliciting an HIV-specific antiserum and recognizing the
CC sequence XILKDWX2. The synthetic peptide is useful in vaccines against

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CC HIV infection and in diagnostic applications. AAW98892 to AAW98906, and
CC AAW98899 to AAW98989 represent synthetic peptides from the present
CC invention
XX
XX Sequence 24 AA;

Query Match 88.6%; Score 109; DB 2; Length 24;
Best Local Similarity 95.7%; Pred. No. 2.1e-08;
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2 NTRKSERIQRGPGRAFTVIGKIG 24
Db 1 NTRKSIRIQRGPGRAFTVIGKIG 23

RESULT 25
AAW98904
ID AAW98904 standard; peptide; 24 AA.
XX
AC AAW98904;
XX
XX 17-OCT-2003 (revised)
DT 26-NOV-1999 (first entry)
XX
XX HIV1 chimeric peptide.
DE
XX HIV; vaccine; immunogenic composition; T cell epitope; B cell epitope;
KW infection; antibody; antiviral.
XX
XX Human immunodeficiency virus 1.
XX
XX US5951986-A.
XX
XX 14-SEP-1999.
XX
XX 06-JUN-1995; 95US-00467881.
PF
XX 09-JUN-1993; 93US-00073378.
PR 09-JUN-1994; 94US-00257528.
XX
XX (CONN-) CONNAUGHT LAB LTD.
XX
XX Klein MH, Chong P, Sia CDY;
XX
XX WPI; 1999-550482/46.
XX
XX Immunogenic composition containing synthetic fusion polypeptides
PT containing both the T and B cell epitopes of the human immunodeficiency
PT virus, useful antigens in producing vaccines.
XX
XX Disclosure; Col 73-74; 43pp; English.
XX
XX This sequence represents a fragment of a HIV1 protein, and can be used in
CC the immunogenic composition of the invention. The composition comprises a
CC synthetic fusion polypeptide which includes a sequence encoding 1 or more
CC T cell epitopes and a sequence encoding 1 or more B cell epitopes and a
CC carrier. Both the T cell and B cell epitopes are derived from HIV
CC proteins. The compositions are useful as vaccines against HIV infection.
CC The composition induces HIV-1-specific polyclonal antibodies that are
CC opsonising and antiviral. The peptide components may be selected to
CC induce a response against different viral isolates and in subjects who
CC recognise different T cell epitopes. (Updated on 17-OCT-2003 to
CC standardise OS field)
XX
XX Sequence 24 AA;

Query Match 88.6%; Score 109; DB 2; Length 24;
Best Local Similarity 95.7%; Pred. No. 2.1e-08;
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2 NTRKSERIQRGPGRAFTVIGKIG 24
Db 1 NTRKSIRIQRGPGRAFTVIGKIG 23

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RESULT 26
AAR15058
ID AAR15058 standard; protein; 25 AA.
XX AC AAR15058;
XX DT 03-JAN-1992 (first entry)
XX DE HIV-1 amplifier peptide #21.
XX KW human immunodeficiency virus; vaccine; human retrovirus; AIDS;
XX KW acquired immunodeficiency syndrome; envelope glycoprotein.
XX OS Synthetic.
XX PN WO9114449-A.
XX PD 03-OCT-1991.
XX PF 19-MAR-1990; 90US-00494749.
XX PR 19-MAR-1990; 90US-00494749.
XX PA (INSP ) INST PASTEUR.
XX PI Girard M;
XX WPI; 1991-310366/42.
XX Enhancing immunogenicity of envelope glyco:protein - for use as vaccine
or immuno:therapeutic drug especially against HIV, HTLV-I and HTLV-II.
XX Claim 13; Page 50; 71pp; English.
XX This peptide is one example of an HIV-1 amplifier peptide for use in a
composition for enhancing the immunogenicity of an envelope glycoprotein
of a virus. The sequence corresponds to the major neutralisation epitope
(loop V3) of HIV-1 bruii isolate and enhances the induction of
persistent neutralising antibodies in the host. The amplifier peptide is
used in addition to an envelope glycoprotein for priming the induction of
neutralising antibodies. The compositions are particularly useful for
vaccinating against HIV, SIV, HTLV-I and HTLV-II
XX Sequence 25 AA;
Query Match 88.6%; Score 109; DB 2; Length 25;
Best Local Similarity 95.7%; Pred. No. 2.1e-08;
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2 NTRKSERIQGPGRAFTVIGKIG 24
Db 2 NTRKSIIRIQGPGRAFTVIGKIG 24
RESULT 27
AAR36587
ID AAR36587 standard; peptide; 25 AA.
XX AC AAR36587;
XX DT 25-MAR-2003 (revised)
XX DT 06-SEP-1993 (first entry)
XX DE Virus neutralising epitope of envelope glycoprotein of HIV.
XX KW Human immunodeficiency virus; gp120; gp160; EGP; VNE; immunity.
XX OS Synthetic.
XX PN WO9308836-A1.
XX
PD 13-MAY-1993.
XX 28-OCT-1992; 92WO-EP002459.
XX 28-OCT-1991; 91US-00782154.
XX 28-OCT-1991; 91US-00782241.
XX 28-OCT-1991; 91US-00782252.
XX (INSP ) INST PASTEUR.
XX Girard M;
XX WPI; 1993-167398/20.
XX Enhancing immunogenicity of viral envelope glycoprotein - by co-
administration of viral envelope glycoprotein itself, and an oligopeptide
derive.
XX Disclosure; Page 82; 107pp; English.
XX A novel method of enhancing the immunogenicity of an envelope
glycoprotein (EGP) of a virus (esp. HIV gp120 or gp160) in a host
comprises admin. to the host at least one EGP of the virus in an amt.
sufficient for priming vaccination and at least one peptide derived from
an amino acid sequence of the EGP (e.g. the sequence shown), where the
peptide comprises at least one virus-neutralisation epitope (VNE). The
complex is able to enhance the induction of neutralising antibodies to
the virus and to confer long lasting immunity, longer than 6 months. See
also AAR36567-86. (Updated on 25-MAR-2003 to correct PN field.)
XX Sequence 25 AA;
Query Match 88.6%; Score 109; DB 2; Length 25;
Best Local Similarity 95.7%; Pred. No. 2.1e-08;
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2 NTRKSERIQGPGRAFTVIGKIG 24
Db 2 NTRKSIIRIQGPGRAFTVIGKIG 24
RESULT 28
AAR04475
ID AAR04475 standard; protein; 25 AA.
XX AC AAR04475;
XX DT 09-SEP-2004 (revised)
XX DT 25-MAR-2003 (revised)
XX DT 20-SEP-1990 (first entry)
XX Human immunodeficiency virus hybrid peptide RPI37.
XX HIV isolates HIV-IIIB and HIV-RF; hybrid peptide RPI37; therapy; AIDS;
XX Principal neutralising domain; antibodies; diagnosis; prophylaxis.
XX Synthetic.
XX WO9003984-A.
XX 19-APR-1990.
XX 03-OCT-1988; 88US-00252949.
XX 03-OCT-1988; 88US-00252949.
XX 01-JUN-1989; 89US-00359543.
XX 19-SEP-1989; 89US-00407663.
XX (REPK ) REPLIGEN CORP.
XX Rusche JR, Putney SD, Javaherian K, Farley J, Grimalia R;
XX Lynn DU, Petrobre J;

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DR WPI; 1990-147824/19.

PT Principal neutralising domain of HIV variants - used for producing

PT peptide(s) and antibodies for diagnosis, prophylaxis and/or therapy

PT therapy of HIV infection.

PS Claim 8 (58); Page 76; 108pp; English.

XX

XX Peptide RP137 comprises segments of the Principal Neutralising Domain

CC (envelope protein) from isolates HIV-RF and HIV-IIIB. The last Cys

CC residue is added for the purpose of crosslinking to carrier proteins.

CC Cysteine residues may be added, so that the residues at or near both ends

CC form a disulfide bond, giving peptide a loop-like configuration, which

CC can be utilised to enhance immunogenic properties of the peptides.

CC Protein is capable of eliciting, and/or binding with, neutralising

CC antibodies. The neutralising domain is bounded by cysteine residues which

CC occur at positions 296 and 331. The peptides can be used as immunogens

CC or screening reagents to generate or identify poly- or monoclonal

CC antibodies. See also AAR04427-R04506 and AAQ04273-Q04279. (Updated on 25-

CC MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PA

CC field.) (Updated on 25-MAR-2003 to correct PI field.)

CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key

XX Sequence 25 AA;

SQ

Query Match 86.2%; Score 106; DB 2; Length 25;

Best Local Similarity 87.5%; Pred. No. 5.7e-08;

Matches 21; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

OY 1 NNTKSRIRIQGPGRAFTVIGKIG 24

DB 1 NNTKSRIRITKPGGRAFTVIGKIG 24

RESULT 29

AAW87618

ID AAW87618 standard; peptide; 25 AA.

XX

AC AAW87618;

XX

DT 17-OCT-2003 (revised)

DT 20-MAR-2003 (revised)

DT 03-MAR-1999 (first entry)

XX

DE Epitope of HIV-1 gp120 protein.

XX

XX Epitope; gp120 protein; monoclonal antibody; HIV-1; antibody BAT123;

KW antibody BAT267; antibody BAT085; T cell infection inhibition;

KW syncytia formation; acquired immune deficiency syndrome; AIDS;

KW AIDS-related complex; passive immunisation; antiviral; cytotoxic;

KW viral load measurement; vaccine.

XX

OS Human immunodeficiency virus 1.

XX

PN US5854400-A.

XX

PD 29-DEC-1998.

XX

PF 22-SEP-1992; 92US-00950571.

XX

XX 29-MAY-1987; 87US-00057445.

PR 24-DEC-1987; 87US-00137861.

PR 26-SEP-1991; 91US-00767533.

XX

PA (TANO-) TANOX INC.

XX

PI Fung MSC, Sun BNC, Sun CRY, Chang NT, Chang TW;

XX

DR WPI; 1999-095002/08.

XX

XX Monoclonal antibodies directed against regions of gp120 of human immune

PT deficiency virus-1 - are neutralising and able to inhibit infection of T

cells and formation of syncytia, used for treatment, prevention or

diagnosis of acquired immune deficiency syndrome.

Claim 2; Col 8; 16pp; English.

The present sequence represents an epitope of the gp120 protein of human

immune deficiency virus (HIV)-1. The sequence comprises amino acids 298

to 322 of gp120. The specification describes monoclonal antibodies which

bind to sequences derived from the present epitope. Specifically, these

antibodies are designated BAT123, 267 and 085. Monoclonal antibodies

neutralise HIV-1, inhibiting both infection of T cells and formation of

syncytia, so are used to treat acquired immune deficiency syndrome (AIDS)

and AIDS-related complex, by passive immunisation, as carriers of

cytotoxic or antiviral agents, and in extracorporeal systems. They can

also be used as immunoassay reagents (for diagnosis or measurement of

viral load) and to screen for neutralising epitopes, potentially useful

in vaccine development. (Updated on 20-MAR-2003 to correct PR field.)

(Updated on 17-OCT-2003 to standardise OS field)

Sequence 25 AA;

Query Match 85.4%; Score 105; DB 2; Length 25;

Best Local Similarity 95.5%; Pred. No. 8e-08;

Matches 21; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 NNTKSRIRIQGPGRAFTVIGK 22

DB 4 NNTKSRIRIQGPGRAFTVIGK 25

RESULT 30

AA42153

ID AAR42153 standard; peptide; 22 AA.

XX

AC AAR42153;

XX

DT 24-OCT-2003 (revised)

DT 25-MAR-2003 (revised)

DT 27-APR-1994 (first entry)

XX

DE gp120 V3 loop sequence of HIV-1 IIIB isolate.

XX

XX Human Immunodeficiency Virus; antigen; ELISA; recombinant antibody;

KW HIV-neutralising monoclonal antibody; immunoglobulin; AIDS;

KW acquired immune deficiency syndrome; chimeric antibody;

KW surface glycoprotein gp120; V3 loop; epitope mapping.

XX

OS Human immunodeficiency virus 1; (IIIB isolate).

XX

XX WO9319785-A1.

PN

PD 14-OCT-1993.

XX

PF 23-MAR-1993; 93WO-US002629.

XX

PR 01-APR-1992; 92US-00861701.

XX

PA (MERI ) MERCK & CO INC.

XX

PI Emimi EA, Conley AJ, Mark GE, Johnson LS, Pfarr DS;

XX

XX WPI; 1993-336600/42.

DR

XX New recombinant human antibody - with HIV neutralising activity against

PT at least two isolates, useful for preventing or treating infection in

PT diagnosis, etc.

XX

PS Example 16; Page 100; 154pp; English.

XX

XX Antibodies able to neutralise more than one HIV-1 isolate are claimed.

CC The gp120 V3 loop sequences from different isolates comprising the

CC Principal Neutralising Determinant motif GGR are given in AAR42153-

CC R42161. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 24-OCT-

CC 2003 to standardise OS field)

XX Sequence 22 AA;

Query Match 83.7%; Score 103; DB 2; Length 22;  
 Best Local Similarity 95.5%; Pred. No. 1.4e-07;  
 Matches 21; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 TRKSIRIQRGPGRAFTVIGKIG 24  
 |||||  
 Db 1 TRKSIRIQRGPGRAFTVIGKIG 22

RESULT 31

AAW07392

ID AAW07392 standard; peptide; 22 AA.

XX

AC AAW07392;

XX 16-OCT-2003 (revised)

DT 24-FEB-1997 (first entry)

XX HIV-1 strain IIIB gp120 V3 loop sequence.

KW HIV-1; gp120; V3 loop; common consensus PND domain; envelop; CD4;  
 KW binding site; stem-loop; lysine branched peptide; AIDS.

XX OS Human immunodeficiency virus 1.  
 XX JP08231423-A.

XX 10-SEP-1996.

XX 27-FEB-1995; 95JP-00038835.

XX 27-FEB-1995; 95JP-00038835.

XX (TERU) TERUMO CORP.

XX (OKUD/) OKUDA K.

XX WPI; 1996-461278/46.

XX Novel AIDS vaccine - comprises branched lysine peptide fragments derived

XX from HIV env protein.

XX Example 2; Page 5-6; 8pp; Japanese.

CC This is the sequence of the V3 loop of the gp120 envelop protein from HIV  
 CC -1 strain IIIB. The sequence was used with a construct comprising part of  
 CC the HIV-1 gp120 V3 loop common consensus PND sequence (AAW07390) fused to  
 CC part of the HIV-1 CD4 binding site (AAW07391) and with the V3 loop  
 CC sequences from HIV-1 strains Thai B (AAW07393) or HGP-30 (AAW07394) to  
 CC generate a lysine branched peptide which is useful for the prevention and  
 CC treatment of AIDS. (Updated on 16-OCT-2003 to standardise OS field)

XX Sequence 22 AA;

Query Match

Best Local Similarity 83.7%; Score 103; DB 2; Length 22;  
 Matches 21; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 NTRKSIRIQRGPGRAFTVIGKI 23

|||||

Db 1 NTRKSIRIQRGPGRAFTVIGKI 22

RESULT 32

AAW07488

ID AAW07488 standard; peptide; 22 AA.

XX

AC AAW07488;

XX 17-OCT-2003 (revised)

DT 17-AUG-1999 (first entry)

XX HIV-1 strain IIIB gp120 V3 loop sequence.  
 XX Light chain; variable region; human; HIV-1; gp120; monoclonal antibody;

KW epitope; V3 loop; heterohybridoma; human immunodeficiency virus-1;  
 KW peripheral blood lymphocyte; Epstein-Barr virus; EBV; AIDS.

XX OS Human immunodeficiency virus 1.

XX PN US9914109-A.

XX 22-JUN-1999.

XX 21-NOV-1994; 94US-00345321.

XX 15-JUN-1990; 90US-00538451.

XX 12-APR-1991; 91US-00684090.

XX 23-APR-1992; 92US-00872675.

XX (UYNV) UNIV NEW YORK STATE.

XX Gorny MK, Zolla-Pazner S;

XX WPI; 1999-370481/31.

XX Heterohybridoma producing human monoclonal antibodies to human

XX immunodeficiency virus-1.

XX Example 5; Col 24; 42pp; English.

XX This sequence represents the V3 loop from the gp120 protein of the human  
 CC immunodeficiency virus-1 (HIV-1) strain IIIB. The invention relates to  
 CC the generation of heterohybridomas producing human monoclonal antibodies  
 CC (see AAX9204-X79207) to a neutralising epitope of HIV-1 prepared by  
 CC transforming peripheral blood lymphocytes with Epstein-Barr virus. The  
 CC antibodies can be used to treat someone infected with HIV-1 or suffering  
 CC from AIDS. (Updated on 17-OCT-2003 to standardise OS field)

XX Sequence 22 AA;

Query Match

Best Local Similarity 83.7%; Score 103; DB 2; Length 22;  
 Matches 21; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 TRKSIRIQRGPGRAFTVIGKIG 24

|||||

Db 1 TRKSIRIQRGPGRAFTVIGKIG 22

RESULT 33

AAR13120

ID AAR13120 standard; peptide; 25 AA.

XX AAR13120;

XX 24-OCT-2003 (revised)

DT 01-OCT-1991 (first entry)

XX Binding site of BAT123 and BAT267 HIV antibodies.

XX Anti-idiotypic; antibody; gp120; HIV; human immunodeficiency virus;  
 KW paratope; complementarity determining region; CDR; immunisation; vaccine;  
 KW immunotoxin; T-cell; AIDS; ARC.

XX Simian-Human immunodeficiency virus.

XX WO9109625-A.

XX 11-JUL-1991.

XX 21-DEC-1989; 89US-00454161.



PR 21-DEC-1989; 89US-00454161.  
 PR 12-JUN-1990; 90US-00531789.  
 XX  
 PA (TANO-) TANOX BIOSYSTEMS INC.  
 XX Chang TW, Fung MSC, Sun CRY, Sun BNC, Chang NT;  
 PI  
 XX WPI; 1991-222664/30.  
 DR  
 XX Monoclonal antibodies specific to the gp120 HIV envelope protein - for  
 PT immunisation against HIV in treatment of AIDS or ARC.  
 PT  
 PS Claim 5; Page 97; 124pp; English.  
 XX  
 CC The peptide corresponds to residues 294-318 of the gp120 envelope protein  
 CC of HIV-1 which is a principal neutralising determinant (PND). Abs  
 CC recognise residues 294-308 (MAB BAT267) or 304-318 (MAB 123). These MAB  
 CC are used to raise anti-idiotypic Abs (AABs). The Abs are useful for  
 CC passive immunisation and as components for immunotoxins which destroy T-  
 CC cells infected with HIV. They inhibit T-cell infection and syncytium  
 CC formation, are group specific and neutralise specific strains of HIV-1.  
 CC They can be used to treat AIDS or ARC. The AABs can be used for active  
 CC immunisation or can be admin with another vaccine to increase  
 CC antigenicity. See also AAR13121. (Updated on 24-OCT-2003 to standardise  
 CC OS field)  
 XX SQ Sequence 25 AA;  
 SQ  
 Query Match 81.3%; Score 100; DB 2; Length 25;  
 Best Local Similarity 90.9%; Pred. No. 4.1e-07;  
 Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1 NNTKSRIRIQGPGRAFTVIGK 22  
 ||||| ||||| ||||| |||||  
 Db 4 NNTKRRIRIQGPGRAFTVIGK 25  
 ||||| ||||| ||||| |||||  
 RESULT 34  
 AAW72819  
 ID AAW72819 standard; peptide; 25 AA.  
 XX  
 AC AAW72819;  
 XX  
 DT 17-OCT-2003 (revised)  
 DT 13-JAN-1999 (first entry)  
 XX  
 DE HIV-1 gp120 epitope 294 to 318.  
 XX  
 KW HIV-1; gp120; epitope; monoclonal antibody; envelope; neutralise;  
 KW inhibit; infection; T-cell; inhibit syncytium formation; AIDS.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 FH Key Location/Qualifiers  
 FT Peptide 1..15  
 FT /label= peptide\_a  
 FT Peptide 11..25  
 FT /label= peptide\_b  
 XX  
 PN US5834599-A.  
 XX  
 PD 10-NOV-1998.  
 XX  
 PF 04-MAR-1993; 93US-00026276.  
 XX  
 PR 29-MAY-1987; 87US-00057445.  
 PR 24-DEC-1987; 87US-00137861.  
 PR 25-APR-1989; 89US-00343540.  
 PR 05-JUN-1992; 92US-00895197.  
 XX  
 PA (TANO-) TANOX BIOSYSTEMS INC.  
 XX  
 PI Sun BN, Fung SC, Kim YW, Sun CR, Chang NT, Chang T;

XX WPI; 1999-008810/01.  
 XX  
 PT Antibody conjugate comprising monoclonal antibody - which binds to  
 PT epitope within amino acid residue of gp120 which neutralises HIV-1  
 PT conjugated with, e.g. cytotoxic agent.  
 XX  
 PS Disclosure; Col 8; 22pp; English.  
 XX  
 CC The present invention describes an antibody conjugate comprising an  
 CC antibody (Ab) which binds to an epitope within amino acid residue 308-322  
 CC of gp120 and neutralises HIV-1, conjugated with a cytotoxic agent, an  
 CC anti-viral agent or an agent which facilitates passage through the blood  
 CC brain barrier. Also described is an antibody conjugate as above but where  
 CC the Ab binds to an epitope within amino acid residue 298-312 of gp120  
 CC which neutralises HIV-1. The present sequence represents an HIV-1 gp120  
 CC epitope corresponding to positions 294 to 318. The Ab are monoclonal Ab  
 CC which bind to the gp120 protein on the envelope of HIV-1. They inhibit  
 CC the infection of T-cells and also inhibit syncytium formation. The  
 CC antibodies are group specific and neutralise different strains and  
 CC isolates of HIV-1. The antibodies have a variety of uses, including the  
 CC treatment and prevention of AIDS and AIDS related complex. They are  
 CC especially used to kill infected T-cells. (Updated on 17-OCT-2003 to  
 CC standardise OS field)  
 XX SQ Sequence 25 AA;  
 SQ  
 Query Match 81.3%; Score 100; DB 2; Length 25;  
 Best Local Similarity 90.9%; Pred. No. 4.1e-07;  
 Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1 NNTKSRIRIQGPGRAFTVIGK 22  
 ||||| ||||| ||||| |||||  
 Db 4 NNTKRRIRIQGPGRAFTVIGK 25  
 ||||| ||||| ||||| |||||  
 RESULT 35  
 AAY85137  
 ID AAY85137 standard; protein; 22 AA.  
 XX  
 AC AAY85137;  
 XX  
 DT 12-SEP-2003 (revised)  
 DT 20-JUN-2000 (first entry)  
 XX  
 DE HIV-1 IIIB V3 loop peptide sequence.  
 XX  
 KW Human immunodeficiency virus type 1; HIV-1; infection; prevent; detect;  
 KW glycoprotein 140; gp140; neutralising antibody; conformational epitope;  
 KW V3 loop.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN US6039957-A.  
 XX  
 PD 21-MAR-2000.  
 XX  
 PF 03-MAR-1997; 97US-00805889.  
 XX  
 PR 10-DEC-1993; 93US-00165314.  
 XX  
 PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
 XX  
 PI Doms RW, Moss B, Earl PL, Broder CC;  
 XX  
 DR WPI; 2000-270121/23.  
 XX  
 PT Producing neutralizing antibodies useful for preventing, treating and  
 PT diagnosing an HIV infection in a mammal comprises administering  
 PT recombinant uncleaved gp140 proteins to a human.  
 XX  
 PS Example 10; Col 12; 15pp; English.  
 XX

CC This sequence represents a human immunodeficiency virus type-1 IIIB V3-loop peptide sequence. The peptide sequence is used to test the reactivity of the antibodies of the invention. The invention relates to a method for the production of neutralising antibodies against conformational epitopes of HIV-1 envelope proteins in humans. The method comprises administering to a human, a recombinant uncleaved gp140 protein retaining its oligomeric structure. The human produces neutralising antibodies against conformational epitopes of the HIV-1 gp140 protein found on the oligomeric structure of the gp140. The anti-HIV-1 gp140 antibodies of the invention can be used for preventing and diagnosing an HIV infection in a mammal. Gp140 antibodies are useful for treating an HIV infection. A diagnostic method using the antibodies involves isolating a body fluid, preferably blood, and contacting it with a labelled monoclonal antibody for gp140, and detecting any bound antibody. (Updated on 12-SEP-2003 to standardise OS field)

XX Sequence 22 AA;

Query Match 80.5%; Score 99; DB 3; Length 22;  
Best Local Similarity 95.2%; Pred. No. 5.1e-07;  
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 NTRKSERIQGPGRAFVTIGK 22

DB 2 NTRKSIRIQGPGRAFVTIGK 22

RESULT 36

AAW76842  
ID AAW76842 standard; peptide; 20 AA.

XX AC AAW76842;

XX 25-JAN-1999 (first entry)

DE Fusion immunoglobulin heavy chain HIV gp120 B cell epitope #12.

XX B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IGH;  
KW human immune deficiency virus; HIV; tolerance; treatment; therapy;  
KW prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;  
KW microbial infection; autoimmune disease; antibody; apoptosis;  
KW antiviral T cell immunity.

XX Mus sp.

OS Homo sapiens.

XX WO9836087-A1.

XX 20-AUG-1998.

XX 13-FEB-1998; 98WO-US002766.

XX 13-FEB-1997; 97US-0040581P.

XX (AMNA-) AMERICAN NAT RED CROSS.

XX Scott D, Zambidis E;

XX WPI; 1998-506315/43.

XX New fusion immunoglobulin heavy chain including gp120 epitopes and related complete antibodies - DNA, vectors and transformed cells, used to induce tolerance to the epitopes for treatment of human immune deficiency virus infection.

PS Claim 10; Page 119; 154pp; English.

XX This sequence is an epitope used in the construction of a novel fusion immunoglobulin heavy chain (IGH) protein with a mammalian, especially human, IGH chain fused in frame at its N-terminus to one or more human immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or transfected cells are used to tolerate subjects to gp120 epitopes and to maintain this tolerance, particularly for treatment of HIV infection,

CC optionally together with other therapeutic/prophylactic agents such as vaccines, chemotherapeutic agents and immune response modifiers. Such proteins can be used against other diseases where an immune response is deleterious, e.g. microbial infection, tumours or autoimmune disease.  
CC Induction of tolerance suppresses production of antibodies against gp120, so prevents or inhibits 'bystander' apoptosis of uninfected T cells that are bound to gp120 protein, maximising induction of protective antiviral T cell immunity

XX Sequence 20 AA;

Query Match 76.4%; Score 94; DB 2; Length 20;  
Best Local Similarity 95.0%; Pred. No. 2.4e-06;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 NTRKSERIQGPGRAFVTIG 21

DB 1 NTRKSIRIQGPGRAFVTIG 20

RESULT 37

AAAR04060  
ID AAR04060 standard; peptide; 21 AA.

XX AC AAR04060;

XX 25-MAR-2003 (revised)

XX 23-JUL-1992 (first entry)

XX Epitope comprising residues 308-327 of HIV env gp 120.

XX Human immunodeficiency virus; retrovirus; vaccine; antibodies; HbC; HBe;  
KW antigen; hepatitis B virus; HBV; core.

XX Synthetic.

XX JP02069194-A.

XX 08-MAR-1990.

XX 02-SEP-1988; 88JP-00220770.

XX 02-SEP-1988; 88JP-00220770.

XX (KAGA ) KAGAKU OYOBI KESSEI RYOH.

XX WPI; 1990-119518/16.

XX N-PSDB; AAQ02417.

XX Antigen granule comprising HBC or HBE antigen - and HIV neutralised epitope obtd. by expression of recombinant prod., for e.g. vaccine.

XX Claim Disclosure; Fig 4; 11pp; Japanese.

XX The synthetic epitope is used in a complex with either the hepatitis B core antigen (HBC) or a sol. cleavage prod. of HBC (HBe), to prepare a vaccine. The peptide corresponds to residues 308-327 of the HIV env glycoprotein 120, with an N-terminal initiation Met. (Updated on 25-MAR-2003 to correct PA field.)

XX Sequence 21 AA;

Query Match 76.4%; Score 94; DB 2; Length 21;  
Best Local Similarity 95.0%; Pred. No. 2.5e-06;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 NTRKSERIQGPGRAFVTI 20

DB 2 NTRKSIRIQGPGRAFVTI 21

RESULT 38

AAAR93073

```

ID AAR93073 standard; peptide; 21 AA.
XX
AC AAR93073;
XX
DT 27-SEP-1996 (first entry)
XX
DE Antigenic peptide CLTB73.
XX
XX Antigen; non-infectious; retrovirus; antigenic marker; immune response;
KW long terminal repeat; gag; pol; env; AIDS; HIV; antibody; therapy.
XX
OS Synthetic.
XX
XX WO9605292-A1.
PN
XX
XX 22-FEB-1996.
XX
XX 15-AUG-1995; 95WO-CA000483.
PF
XX 15-AUG-1994; 94US-00290105.
PR
XX (CONN-) CONNAUGHT LAB LTD.
PA
XX
XX Rovinski B, Cao S, Yao F, Persson R, Klein MH;
PI
XX WPI; 1996-139690/14.
XX
XX Antigenically marked non-infectious retrovirus-like particles - used to
PT vaccinate against, and in the treatment of, AIDS and AIDS related
PT conditions.
XX
XX Example 4; Page 38; 75pp; English.
XX
XX AAR93071-R93074 represent sequences used as antigenic marker epitopes in
CC a non-infectious retrovirus-like particle of the invention. This sequence
CC represents the antigenic peptide CLTB73. The retrovirus-like particle
CC contains 1-4 repeats of this sequence (or AAR93061). The coding sequence
CC for the retroviral particle of the invention comprises a modified
CC retroviral genome deficient in long terminal repeats, but containing the
CC gag, pol and env genes in their natural genomic arrangement, along with
CC the antigenic marker sequence. The retroviral particle can be used in an
CC immunogenic composition capable of eliciting a retroviral specific immune
CC response. The composition is for parenteral or mucosal administration,
CC preferably oral, anal, vaginal or intranasal administration. The
CC composition can be used for immunising a host to produce a retroviral
CC specific immune response, such as against AIDS and AIDS related
CC conditions. The particles may also be used in the prophylactic (or
CC curative) treatment of AIDS and related conditions, by acting to displace
CC the binding of the HIV virus to human or animal cells, or by disrupting
CC the 3-dimensional organisation of the virus. The particle can also be
CC used to identify antibodies specifically reacting with retrovirus
CC antigens
XX
XX Sequence 21 AA;
SQ
Query Match 76.4%; Score 94; DB 2; Length 21;
Best Local Similarity 90.5%; Pred. No. 2.5e-06;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 NTRKSRIRIQRGFGRAFTVIGK 22
DB 1 NTRKRIRIQRGFGRAFTVIGK 21

RESULT 39
AAW75478
ID AAW75478 standard; peptide; 21 AA.
XX
XX AAW75478;
XX
XX 17-OCT-2003 (revised)
DT 20-MAR-2003 (revised)
DT 27-APR-1999 (first entry)

QY 2 NTRKSRIRIQRGFGRAFTVIGK 22
DB 1 NTRKRIRIQRGFGRAFTVIGK 21

RESULT 40
AAW75478
ID AAW75478 standard; peptide; 21 AA.
XX
XX AAW75478;
XX
XX 17-OCT-2003 (revised)
DT 20-MAR-2003 (revised)
DT 04-AUG-1999 (first entry)
XX
XX HIV-1 isolate HXB2 gp120 peptide.
DE
XX
XX Retrovirus-like particle; modified HIV genome;
KW chimeric envelope glycoprotein; HIV-1 gp120; conserved region 2; HIV-1;
XX HIV-2; HTLV-I; HTLV-II; vaccine.
XX
XX Human immunodeficiency virus 1.
OS
XX
XX US5912338-A.
PN

```

HIV-1 strain HXB2 gp120 V3 loop peptide amino acids 302-322.

V3 loop; gp120 protein; HIV-1; retrovirus-like particle; genome; HIV-2; long terminal repeat; LTR; chimeric; envelope; glycoprotein; HTLV-I; HTLV-II; vaccine; human T-lymphotropic virus.

Human immunodeficiency virus 1.

US5866137-A.

02-FEB-1999.

30-MAY-1995; 95US-00453745.

15-JUN-1992; 92US-00839751.

09-JUN-1993; 93US-00073526.

(CONN-) CONNAUGHT LAB LTD.

Klein MH, Cao SX, Haynes J, Rovinski B; WPI; 1999-141864/12.

Immunogenic retrovirus-like particle - with chimeric HIV-1 envelope protein containing heterologous retroviral amino acid sequence.

Example 4; Col 7-8; 12pp; English.

This sequence represents a peptide from the V3 loop of the gp120 protein from the human immunodeficiency virus type 1 (HIV-1) strain HXB2. The peptide is used to determine antibody responses after immunisation with a self-assembled, non-infectious, non-replicating, immunogenic, retrovirus-like particle. The retrovirus-like particle comprises a modified HIV genome devoid of long terminal repeats (LTRs) and contains a nucleotide sequence coding for a chimeric envelope glycoprotein. The chimeric envelope glycoprotein has the HIV-1 gp120 conserved region 2 and a second retroviral envelope amino acid sequence from a heterologous strain of HIV -1, HIV-2, HTLV-I or HTLV-II inserted into the first retroviral envelope amino acid sequence (see AAW75474-W75477). The novel retrovirus-like particle is useful in vaccines against HIV. (Updated on 20-MAR-2003 to correct PA field.) (Updated on 17-OCT-2003 to standardise OS field)

Sequence 21 AA;

Query Match 76.4%; Score 94; DB 2; Length 21; Best Local Similarity 90.5%; Pred. No. 2.5e-06; Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 NTRKSRIRIQRGFGRAFTVIGK 22  
DB 1 NTRKRIRIQRGFGRAFTVIGK 21

RESULT 40

AAW75478

ID AAW75478 standard; peptide; 21 AA.

XX

AC AAW75478;

XX

DT 17-OCT-2003 (revised)

DT 20-MAR-2003 (revised)

DT 04-AUG-1999 (first entry)

XX

XX HIV-1 isolate HXB2 gp120 peptide.

DE

XX

XX Retrovirus-like particle; modified HIV genome;

KW chimeric envelope glycoprotein; HIV-1 gp120; conserved region 2; HIV-1;

XX HIV-2; HTLV-I; HTLV-II; vaccine.

XX

XX Human immunodeficiency virus 1.

OS

XX

XX US5912338-A.

PN

XX PD 15-JUN-1999.  
 XX PF 30-MAY-1995; 95US-00452520.  
 XX PR 15-JUN-1992; 92US-00839751.  
 XX PR 09-JUN-1993; 93US-00073526.  
 XX PA (ROVI/) ROVINSKI B.  
 XX PI Cao SX, Klein MH, Haynes J, Rovinski B;  
 XX DR WPI; 1999-357220/30.  
 XX PT Immunogenic retrovirus like particles comprising modified HIV genomes,  
 XX PT useful as vaccines against HIV.  
 XX PS Example 4; Col 9-10; 12pp; English.  
 XX CC The specification describes a nucleic acid molecule encoding a self  
 CC assembled, non-infectious, non-replicating, immunogenic, retrovirus-like  
 CC particle. The retroviral particle comprises a modified HIV genome devoid  
 CC of long terminal repeats containing a nucleotide sequence coding for a  
 CC chimeric envelope glycoprotein which has a first (a) and second (b)  
 CC retroviral envelope amino acid sequence, where (a) contains the HIV-1  
 CC gp120 conserved region 2, and (b) contains a retroviral envelope amino  
 CC acid sequence of a heterologous strain of HIV-1, HIV-2, HTLV-I or HTLV-II  
 CC inserted into (a) at an endogenous site (BgIII and StuI). (b) may  
 CC comprise peptides AAY16049-51 and AAY16055. The nucleic acids are useful  
 CC as vaccines against HIV. The present sequence is used in the course of  
 CC the invention. (Updated on 20-MAR-2003 to correct PR field.) (Updated on  
 CC 17-OCT-2003 to standardise OS field)  
 XX SQ Sequence 21 AA;  
 XX Query Match 76.4%; Score 94; DB 2; Length 21;  
 XX Best Local Similarity 90.5%; Pred. No. 2.5e-06;  
 XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 2 NTRKSERIQRGPGRAFTVIGK 22  
 DB 1 NTRKRIRIQRGPGRAFTVIGK 21  
 RESULT 41  
 AAW85568  
 ID AAW85568 standard; peptide; 21 AA.  
 XX AC AAW85568;  
 XX DT 20-MAR-2003 (revised)  
 XX DT 24-FEB-1999 (first entry)  
 XX DE Human immunodeficiency virus type 1 derived peptide.  
 XX KW Immunoassay diagnostic kit; antibody detection;  
 XX KW chimeric envelope protein; HIV-1 gp120 conserved region 2; HIV-1; HIV-2;  
 XX KW HTLV-I; HTLV-II.  
 XX OS Synthetic.  
 XX OS Human immunodeficiency virus 1.  
 XX PN US5849475-A.  
 XX PD 15-DEC-1998.  
 XX PF 30-MAY-1995; 95US-00452503.  
 XX PR 15-JUN-1992; 92US-00839751.  
 XX PR 09-JUN-1993; 93US-00073526.  
 XX PA (CONN-) CONNAUGHT LAB LTD.  
 XX PI

PI Klein MH, Cao SX, Haynes J, Rovinski B;  
 XX WPI; 1999-069713/06.  
 XX PT Immunoassay diagnostic kit for detecting antibodies - comprising chimeric  
 XX PT retrovirus-like particles.  
 XX PS Example 4; Col 9-10; 12pp; English.  
 XX CC The present sequence represents a Human immunodeficiency virus type 1  
 CC derived peptide. The peptide is used in the immunoassay diagnostic kit of  
 CC the invention. The specification describes an immunoassay diagnostic kit  
 CC for detecting antibodies in a sample, which comprises an antigen  
 CC consisting of a self-assembled, non-infectious, non-replicating,  
 CC immunogenic, retrovirus-like particle encoded by a modified HIV genome  
 CC that is devoid of long terminal repeats and contains a nucleotide  
 CC sequence coding for a chimeric envelope protein having a first amino acid  
 CC sequence containing HIV-1 gp120 conserved region 2 and a second amino  
 CC acid sequence containing an envelope sequence of a heterologous strain of  
 CC HIV-1, HIV-2, HTLV-I or HTLV-II. (Updated on 20-MAR-2003 to correct PR  
 CC field.) (Updated on 20-MAR-2003 to correct PA field.)  
 XX SQ Sequence 21 AA;  
 XX Query Match 76.4%; Score 94; DB 2; Length 21;  
 XX Best Local Similarity 90.5%; Pred. No. 2.5e-06;  
 XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 2 NTRKSERIQRGPGRAFTVIGK 22  
 DB 1 NTRKRIRIQRGPGRAFTVIGK 21  
 RESULT 42  
 AAU08699  
 ID AAU08699 standard; peptide; 21 AA.  
 XX AC AAU08699;  
 XX DT 18-DEC-2001 (first entry)  
 XX DE Retrovirus-like particle CLTB73 containing a V3 (HXB2) antigenic marker.  
 XX KW Human immunodeficiency virus; HIV; retroviral antigen; gag; pol; env;  
 XX KW immune response; antigenic marker; antigenic epitope; retrovirus.  
 XX OS Human immunodeficiency virus.  
 XX OS Synthetic.  
 XX PN US6291157-B1.  
 XX PD 18-SEP-2001.  
 XX PF 23-FEB-1998; 98US-00027955.  
 XX PR 23-FEB-1998; 98US-00027955.  
 XX PA (CONN-) CONNAUGHT LAB LTD.  
 XX PI Rovinski B, Cao S, Yao F, Persson R, Klein MH;  
 XX WPI; 2001-595518/67.  
 XX PT Differentiating between infection by human immunodeficiency virus (HIV)  
 XX PT and antiserum generated by immunization against HIV, comprises use of non  
 XX PT -infectious, non-replicating HIV-like particle with heterologous,  
 XX PT antigenic anchor sequence.  
 XX PS Disclosure; Col 17; 28pp; English.  
 XX CC The invention relates to a method for determining the presence of  
 XX CC antibodies specifically reactive with HIV retroviral antigens in a  
 XX CC sample. This involves contacting a sample suspected of containing HIV-

CC specific antibodies with a non-infectious, non-replicating, immunogenic  
 CC HIV-like particle as an antigen. The antigen comprises an assembly of a  
 CC gag gene product, a pol gene product and a modified env gene product  
 CC containing a non-retroviral heterologous, antigenic, anchor sequence that  
 CC replaces the endogenous anchoring functions of the env gene product. The  
 CC method detects immune complex formation between HIV-specific antibodies  
 CC and the antigens. The method is also useful for identifying antiserum  
 CC generated by immunisation with an immunogenic composition capable of  
 CC eliciting HIV-specific immune response. The antigenic marker may comprise  
 CC at least one antigenic epitope from another virus. This sequence  
 CC represents a retrovirus-like particle containing an antigenic marker  
 XX  
 XX Sequence 21 AA;  
 SQ

Query Match 76.4%; Score 94; DB 4; Length 21;  
 Best Local Similarity 90.5%; Pred. No. 2.5e-06;  
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 NTRKSRIRIQGPGRAFTVIGK 22  
 ||||| ||||| ||||| ||||| |||||  
 Db 1 NTRKRIRIQGPGRAFTVIGK 21

RESULT 43  
 AAR57470  
 ID AAR57470 standard; protein; 22 AA.  
 XX  
 AC AAR57470;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 21-MAR-1995 (first entry)  
 XX  
 XX  
 DE HIV BRU V3 loop peptide.  
 XX  
 KW Immunisation; vaccine; therapy; prophylaxis; defective gene;  
 KW non-functional gene; template; antisense; ribozyme; bupivacaine;  
 KW human immunodeficiency virus; acquired immune deficiency syndrome; HIV;  
 KW AIDS; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX WO9416737-A1.  
 PN  
 XX  
 PD 04-AUG-1994.  
 PP  
 PP 26-JAN-1994; 94WO-US000899.  
 XX  
 PR 26-JAN-1993; 93US-0008342.  
 PR 11-MAR-1993; 93US-00029336.  
 PR 15-JUL-1993; 93US-00093235.  
 PR 21-SEP-1993; 93US-00124962.  
 PR 21-SEP-1993; 93US-00125012.  
 PA (WEIN/) WEINER D B.  
 PA (WILL/) WILLIAMS W V.  
 PA (WANG/) WANG B.  
 PA (CONE/) CONEY L R.  
 PA (MERV/) MERVA M J.  
 PA (ZURA/) ZURAWSKI V R.  
 XX  
 XX Weiner DB, Williams WV, Wang B, Coney LR, Merva MJ, Zurawski VR;  
 PI WPI; 1994-263787/32.  
 DR  
 XX  
 XX Method for introducing genetic material into cells - utilises  
 PT polynucleotide function enhancer and nucleic acid free of retroviral  
 PT particles, e.g. HIV immunisation.  
 XX  
 XX Example 3; Page 44; 136pp; English.  
 PS  
 CC A genetic vaccine against HIV contains a DNA construct which comprises  
 CC the sequence encoding gp160. The genetic material was then introduced  
 CC into the cells of an individual by (a) contacting the individual's cells

CC with a polynucleotide function enhancer (bupivacaine) and (b)  
 CC administering to the cells the nucleic acid molecule free of retroviral  
 CC particles. Nucleic acid molecules which are delivered to cells may serve  
 CC as genetic templates for proteins that function as prophylactic and/or  
 CC therapeutic immunising agents; replacement copies of defective, missing  
 CC or non-functional genes; genetic templates for therapeutic proteins;  
 CC genetic templates for antisense molecules or as genetic templates for  
 CC ribozymes. This peptide was derived from the V3 loop of an HIV strain (an  
 CC epitope targeted by HIV neutralising antibodies) and was used to  
 CC determine whether the anti-gp160 antibodies elicited in mice immunised  
 CC with the genetic vaccine were reactive with this region. (Updated on 25-  
 CC MAR-2003 to correct PN field.)  
 XX  
 XX Sequence 22 AA;  
 SQ

Query Match 76.4%; Score 94; DB 2; Length 22;  
 Best Local Similarity 90.5%; Pred. No. 2.6e-06;  
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 NTRKSRIRIQGPGRAFTVIGK 22  
 ||||| ||||| ||||| ||||| |||||  
 Db 2 NTRKRIRIQGPGRAFTVIGK 22

RESULT 44  
 AAE20149  
 ID AAE20149 standard; peptide; 24 AA.  
 XX  
 AC AAE20149;  
 XX  
 DT 29-AUG-2003 (revised)  
 DT 18-JUN-2002 (first entry)  
 XX  
 XX Human immunodeficiency virus type 1 (HIV-1) V3IIB peptide.  
 XX  
 KW Human immunodeficiency virus type 1; HIV-1; adjuvant; immunomodulator;  
 KW alpha-2-macroglobulin; 3-O-deacylated monophosphoryl lipidA; MPL; GM-CSF;  
 KW granulocyte macrophage colony stimulating factor; immune response;  
 KW vaccine; V3IIB peptide.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 XX WO200215930-A1.  
 PN  
 XX  
 PD 28-FEB-2002.  
 XX  
 XX 27-AUG-2001; 2001WO-US026589.  
 PF  
 XX 25-AUG-2000; 2000US-0227624P.  
 PR  
 XX (UYDU-) UNIV DUKE.  
 PA  
 PI Haynes BF, Liao H, Patel DD;  
 XX WPI; 2002-269315/31.  
 DR  
 XX  
 XX Use of 2-macroglobulin (2Masterisk), 3-O-deacylated monophosphoryl lipid  
 PT A (MPL) and granulocyte macrophage colony stimulating factor (GM-CSF) for  
 PT eliciting an immune response.  
 PT  
 XX Example 2; Page 21; 53pp; English.  
 PS  
 XX The invention relates to a composition comprising activated alpha-2-  
 CC macroglobulin (alpha 2M asterisk ), 3-O-deacylated monophosphoryl lipid A  
 CC (MPL) and granulocyte macrophage colony stimulating factor (GM-CSF). The  
 CC invention also relates to an adjuvant suitable for use in multivalent HIV  
 CC immunogenic compositions. The compositions is useful for eliciting an  
 CC immune response. The present sequence is human immunodeficiency virus  
 CC type 1 (HIV-1) V3IIB peptide used in the exemplification of the  
 CC invention. (Updated on 29-AUG-2003 to standardise OS field)  
 XX  
 XX Sequence 24 AA;  
 SQ

Query Match 76.4%; Score 94; DB 5; Length 24;  
Best Local Similarity 95.0%; Pred. No. 2.9e-06;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 NNTRKSERIQGPGRAFTVI 20  
Db 5 NNTRKSIRIQGPGRAFTVI 24

RESULT 45  
AAR63820  
ID AAR63820 standard; peptide; 25 AA.  
XX  
AC AAR63820;  
XX  
DT 16-OCT-2003 (revised)  
DT 25-MAR-2003 (revised)  
DT 29-JUN-1995 (first entry)  
XX  
DE HIV-1 gp120-23 epitope amino acids 296-230.  
XX  
KW Human immunodeficiency virus type 1; HIV-1; gp120 epitopes; vaccines;  
KW HIV neutralising antibodies.  
XX  
OS Human immunodeficiency virus 1.  
XX  
PN WO9423746-A1.  
XX  
PD 27-OCT-1994.  
XX  
PF 15-APR-1994; 94WO-SE000340.  
XX  
PR 16-APR-1993; 93US-00048976.  
XX  
PA (SYNT-) SYNTELLO VACCINE DEV AB.  
XX  
PI Vahlne A, Svennerholm B, Rymo L, Jeansson S, Horal P;  
XX  
DR WPI; 1994-341488/42.  
XX  
PT New peptide(s) comprising HIV gp120 epitope(s) - for prodn. of vaccines  
PT against HIV infections.  
XX  
PS Claim 1; Page 18; 77pp; English.  
XX

CC AAR63809-R63849 are epitopes from the human immunodeficiency virus type 1  
CC (HIV-1) gp120, by binding one or more of these epitopes to a carrier a  
CC HIV vaccine is produced. These vaccines can elicit the production of HIV-  
CC neutralising antibodies in monkeys, and therefore may be used to prevent  
CC HIV infections, and to heighten the immune response in HIV infected  
CC humans. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 16-OCT-  
CC 2003 to standardise OS field)  
XX  
SQ Sequence 25 AA;

Query Match 76.4%; Score 94; DB 2; Length 25;  
Best Local Similarity 95.0%; Pred. No. 3e-06;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 NNTRKSERIQGPGRAFTVI 20  
Db 6 NNTRKSIRIQGPGRAFTVI 25

Search completed: May 16, 2005, 13:05:13  
Job time : 171.846 secs

| Result No. | Score | Query |        | DB | ID     | Description         |
|------------|-------|-------|--------|----|--------|---------------------|
|            |       | Match | Length |    |        |                     |
| 1          | 62    | 50.4  | 23     | 2  | Q9E8S7 | Q9E8S7 human immun  |
| 2          | 56    | 45.5  | 25     | 2  | Q8AQX9 | Q8AQX9 human immun  |
| 3          | 56    | 45.5  | 25     | 2  | Q8AQY0 | Q8AQY0 human immun  |
| 4          | 52    | 42.3  | 25     | 2  | O10481 | O10481 human immun  |
| 5          | 48    | 39.0  | 25     | 2  | Q9QEX7 | Q9QEX7 human immun  |
| 6          | 46    | 37.4  | 25     | 2  | Q8AQY1 | Q8AQY1 human immun  |
| 7          | 46    | 37.4  | 25     | 2  | Q8AQY2 | Q8AQY2 human immun  |
| 8          | 45    | 36.6  | 25     | 2  | Q7ZJT3 | Q7ZJT3 human immun  |
| 9          | 39    | 31.7  | 23     | 2  | Q9PXF1 | Q9PXF1 human immun  |
| 10         | 39    | 31.7  | 23     | 2  | Q9ENM9 | Q9ENM9 human immun  |
| 11         | 34    | 27.6  | 17     | 2  | Q78324 | Q78324 human immun  |
| 12         | 33    | 26.8  | 17     | 2  | Q78326 | Q78326 human immun  |
| 13         | 32    | 26.0  | 17     | 2  | Q78345 | Q78345 human immun  |
| 14         | 32    | 26.0  | 17     | 2  | Q78378 | Q78378 human immun  |
| 15         | 31    | 25.2  | 17     | 2  | Q78381 | Q78381 human immun  |
| 16         | 31    | 25.2  | 24     | 2  | Q6TQT6 | Q6TQT6 saccharomyc  |
| 17         | 30.5  | 24.8  | 17     | 2  | Q78328 | Q78328 human immun  |
| 18         | 29    | 23.6  | 17     | 2  | Q78323 | Q78323 human immun  |
| 19         | 29    | 23.6  | 17     | 2  | Q78327 | Q78327 human immun  |
| 20         | 29    | 23.6  | 17     | 2  | Q78380 | Q78380 human immun  |
| 21         | 29    | 23.6  | 22     | 2  | Q6U2M7 | Q6U2M7 sechium edu  |
| 22         | 28    | 22.8  | 18     | 2  | Q9ZG65 | Q9ZG65 chlamydia t  |
| 23         | 27    | 22.0  | 16     | 2  | Q9UCK9 | Q9UCK9 homo sapien  |
| 24         | 27    | 22.0  | 16     | 2  | Q9UCL0 | Q9UCL0 homo sapien  |
| 25         | 27    | 22.0  | 17     | 2  | Q16228 | Q16228 homo sapien  |
| 26         | 27    | 22.0  | 19     | 2  | Q6EML0 | Q6EML0 meleagris g  |
| 27         | 27    | 22.0  | 19     | 2  | Q6EML1 | Q6EML1 gallus gall  |
| 28         | 27    | 22.0  | 22     | 2  | Q924C7 | Q924C7 mus musculus |
| 29         | 27    | 22.0  | 23     | 2  | Q94781 | Q94781 trypanosoma  |
| 30         | 27    | 22.0  | 25     | 2  | O11890 | O11890 gb virus c/  |
| 31         | 27    | 22.0  | 25     | 2  | O11891 | O11891 gb virus c/  |

RT "Envelope diversity, coreceptor usage and syncytium-inducing phenotype  
RT of HIV-1 variants in saliva and blood during primary infection.";  
RL AIDS 17:2025-2033(2003).  
DR EMBL; AF536914; AAN63929.1; -.  
DR GO; GO:0016021; C: integral to membrane; IEA.  
DR GO; GO:0019028; C: viral capsid; IEA.  
DR GO; GO:0019031; C: viral envelope; IEA.  
DR GO; GO:0005198; F: structural molecule activity; IEA.  
DR InterPro; IPR000777; GP120.  
KW Envelope protein.  
FT NON\_TER 1  
FT NON\_TER 25  
SQ SEQUENCE 25 AA; 2749 MW; 9B6E9DACH8D56C0C CRC64;  
  
Query Match 45.5%; Score 56; DB 2; Length 25;  
Best Local Similarity 58.3%; Pred. No. 0.069;  
Matches 14; Conservative 1; Mismatches 7; Indels 2; Gaps 1;  
  
QY 1 NNTKSERIORGPGRAFTVIG 24  
DB 2 NNTKRS--INIGGRAFYATDIIG 23  
  
RESULT 3  
QY Q8AQY0 PRELIMINARY; PRT; 25 AA.  
AC Q8AQY0; (TREMBLrel. 23, Created)  
DT 01-MAR-2003 (TREMBLrel. 23, Last sequence update)  
DT 01-MAR-2003 (TREMBLrel. 23, Last sequence update)  
DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)  
DE Envelope glycoprotein (Fragment).  
GN Name=env;  
OS Human immunodeficiency virus 1.  
OC Viruses; Retrovirdae; Retroviridae; Lentivirus.  
OX NCBI\_TaxID=11676;  
RN [1]  
RP MEDLINE=22860939; PubMed=14502005;  
RA Freil S.A., Fiscus S.A., Pilcher C.D., Meneses P., Giner J.,  
Patrick E., Lemox J.L., Hicks C.B., Bron J.J. Jr., Shugars D.C.;  
RT "Envelope diversity, coreceptor usage and syncytium-inducing phenotype  
of HIV-1 variants in saliva and blood during primary infection.";  
RL AIDS 17:2025-2033(2003).  
DR EMBL; AF536913; AAN63928.1; -.  
DR GO; GO:0016021; C: integral to membrane; IEA.  
DR GO; GO:0019028; C: viral capsid; IEA.  
DR GO; GO:0019031; C: viral envelope; IEA.  
DR GO; GO:0005198; F: structural molecule activity; IEA.  
DR InterPro; IPR000777; GP120.  
KW Envelope protein.  
FT NON\_TER 1  
FT NON\_TER 25  
SQ SEQUENCE 25 AA; 2749 MW; 9B6E9DACH8D56C0C CRC64;  
  
Query Match 45.5%; Score 56; DB 2; Length 25;  
Best Local Similarity 58.3%; Pred. No. 0.069;  
Matches 14; Conservative 1; Mismatches 7; Indels 2; Gaps 1;  
  
QY 1 NNTKSERIORGPGRAFTVIG 24  
DB 2 NNTKRS--INIGGRAFYATDIIG 23  
  
RESULT 4  
QY Q10481 PRELIMINARY; PRT; 25 AA.  
AC Q10481;  
DT 01-JUL-1997 (TREMBLrel. 04, Created)  
DT 01-JUL-1997 (TREMBLrel. 04, Last sequence update)  
DT 01-JUN-2003 (TREMBLrel. 24, Last annotation update)  
DE Envelope glycoprotein (Fragment).  
GN Name=env;  
OS Human immunodeficiency virus 1.

OC Viruses; Retrovirdae; Retroviridae; Lentivirus.  
OX NCBI\_TaxID=11676;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=97255649; PubMed=9100996;  
RA Rencher S.D., Lockey T.D., Slobod K.S., Hurwitz J.L.;  
RT "Drift from the GPGRAF HIV-1 envelope V3 crown sequence in a North  
American inner city.";  
RL AIDS Res. Hum. Retroviruses 13:527-528(1997).  
DR EMBL; U81241; AAB53843.1; -.  
DR GO; GO:0016021; C: integral to membrane; IEA.  
DR GO; GO:0019028; C: viral capsid; IEA.  
DR GO; GO:0019031; C: viral envelope; IEA.  
DR GO; GO:0005198; F: structural molecule activity; IEA.  
DR InterPro; IPR000777; GP120.  
DR InterPro; IPR011056; Pept\_S24\_S26\_C.  
DR Pfam; PF00516; GP120; 1.  
KW AIDS; Coat protein; Envelope protein; Glycoprotein; Transmembrane.  
FT NON\_TER 1  
FT NON\_TER 25  
SQ SEQUENCE 25 AA; 2801 MW; 25E1B150CD7C14B6 CRC64;  
  
Query Match 42.3%; Score 52; DB 2; Length 25;  
Best Local Similarity 61.9%; Pred. No. 0.33;  
Matches 13; Conservative 0; Mismatches 6; Indels 2; Gaps 1;  
  
QY 1 NNTKSERIORGPGRAFTVIG 21  
DB 6 NNTKRG--IHGFGRAFTYTKG 24  
  
RESULT 5  
QY Q9QEX7 PRELIMINARY; PRT; 25 AA.  
AC Q9QEX7;  
DT 01-MAY-2000 (TREMBLrel. 13, Created)  
DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)  
DT 01-JUN-2003 (TREMBLrel. 24, Last annotation update)  
DE Envelope glycoprotein (Fragment).  
GN Name=env;  
OS Human immunodeficiency virus 1.  
OC Viruses; Retrovirdae; Retroviridae; Lentivirus.  
OX NCBI\_TaxID=11676;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=21103026; PubMed=11170057;  
RX DOI=10.1002/1096-9071(200103)63:3<197::AID-JMWI1000>3.3.CO;2-G;  
RA Lin H.J., Siwak B.B., Lauder I.J., Hollinger F.B.;  
RT "Long-term culture of human immunodeficiency virus type 1 resulting in  
loss of glycosylation sites.";  
RL J. Med. Virol. 63:197-202(2001).  
DR EMBL; AF178663; AAF04369.1; -.  
DR GO; GO:0016021; C: integral to membrane; IEA.  
DR GO; GO:0019028; C: viral capsid; IEA.  
DR GO; GO:0019031; C: viral envelope; IEA.  
DR GO; GO:0005198; F: structural molecule activity; IEA.  
DR InterPro; IPR000777; GP120.  
DR InterPro; IPR011056; Pept\_S24\_S26\_C.  
DR Pfam; PF00516; GP120; 1.  
KW AIDS; Coat protein; Envelope protein; Glycoprotein; Transmembrane.  
FT NON\_TER 1  
FT NON\_TER 25  
SQ SEQUENCE 25 AA; 2818 MW; 9C6EBA908EB5ED47 CRC64;  
  
Query Match 39.0%; Score 48; DB 2; Length 25;  
Best Local Similarity 57.1%; Pred. No. 1.5;  
Matches 12; Conservative 2; Mismatches 5; Indels 2; Gaps 1;  
  
QY 1 NNTKSERIORGPGRAFTVIG 21  
DB 7 NNTKRS--IPLGQGRAFTTIG 25



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RESULT 6
Q8AQY1 ID Q8AQY1 PRELIMINARY; PRT; 25 AA.
AC Q8AQY1;
DT 01-MAR-2003 (TRENBLrel. 23, Created)
DT 01-MAR-2003 (TRENBLrel. 23, Last sequence update)
DT 01-OCT-2003 (TRENBLrel. 25, Last annotation update)
DE Envelope glycoprotein (Fragment).
GN Name=env;
OS Human immunodeficiency virus 1.
OC Viruses; Retroid viruses; Retroviridae; Lentivirus.
OX NCBI_TaxID=11676;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22860939; PubMed=14502005;
RA Freil S.A., Fliscus S.A., Pilcher C.D., Menezes P., Giner J.,
RA Patrick E., Lennox J.L., Hicks C.B., Eron J.J. Jr., Shugars D.C.;
RT "Envelope diversity, coreceptor usage and syncytium-inducing phenotype
RT of HIV-1 variants in saliva and blood during primary infection.";
RL AIDS 17:2025-2033(2003).
DR EMBL; AF536912; AANG3927.1; -.
DR GO; GO:0019031; C:viral envelope; IEA.
DR InterPro; IPR000777; GP120.
KW Envelope protein.
FT NON TER 1
FT NON TER 25
SQ SEQUENCE 25 AA; 2601 MW; 71B5A774CE256C09 CRC64;

Query Match 37.4%; Score 46; DB 2; Length 25;
Best Local Similarity 54.2%; Pred. No. 3.4;
Matches 13; Conservative 0; Mismatches 9; Indels 2; Gaps 1;

QY 1 NNTKSERIQRGPGRAFTVIGIKG 24
| | | | |
DB 2 NNTKRG--IHIGPGGAFYGTDIIG 23

RESULT 7
Q8AQY2 ID Q8AQY2 PRELIMINARY; PRT; 25 AA.
AC Q8AQY2;
DT 01-MAR-2003 (TRENBLrel. 23, Created)
DT 01-MAR-2003 (TRENBLrel. 23, Last sequence update)
DT 01-OCT-2003 (TRENBLrel. 25, Last annotation update)
DE Envelope glycoprotein (Fragment).
GN Name=env;
OS Human immunodeficiency virus 1.
OC Viruses; Retroid viruses; Retroviridae; Lentivirus.
OX NCBI_TaxID=11676;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22860939; PubMed=14502005;
RA Freil S.A., Fliscus S.A., Pilcher C.D., Menezes P., Giner J.,
RA Patrick E., Lennox J.L., Hicks C.B., Eron J.J. Jr., Shugars D.C.;
RT "Envelope diversity, coreceptor usage and syncytium-inducing phenotype
RT of HIV-1 variants in saliva and blood during primary infection.";
RL AIDS 17:2025-2033(2003).
DR EMBL; AF536911; AANG3926.1; -.
DR GO; GO:0019031; C:viral envelope; IEA.
DR InterPro; IPR000777; GP120.
KW Envelope protein.
FT NON TER 1
FT NON TER 25
SQ SEQUENCE 25 AA; 2601 MW; 71B5A774CE256C09 CRC64;

Query Match 37.4%; Score 46; DB 2; Length 25;
Best Local Similarity 54.2%; Pred. No. 3.4;
Matches 13; Conservative 0; Mismatches 9; Indels 2; Gaps 1;

QY 1 NNTKSERIQRGPGRAFTVIGIKG 24
| | | | |
DB 2 NNTKRG--IHIGPGGAFYGTDIIG 23

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RESULT 8
Q7ZJT3 ID Q7ZJT3 PRELIMINARY; PRT; 25 AA.
AC Q7ZJT3;
DT 01-JUN-2003 (TRENBLrel. 24, Created)
DT 01-JUN-2003 (TRENBLrel. 24, Last sequence update)
DT 01-MAR-2004 (TRENBLrel. 26, Last annotation update)
DE Envelope glycoprotein (Fragment).
GN Name=env;
OS Human immunodeficiency virus 1.
OC Viruses; Retroid viruses; Retroviridae; Lentivirus.
OX NCBI_TaxID=11676;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22439926; PubMed=12552446;
RA Iversen A.K.N., Christiansen C.B., Attermann J., Eugen-Olsen J.,
RA Schulman S., Berntorp E., Ingerslev J., Fugger L., Scheibel E.,
RA Tengborn L., Gerstoft J., Dickmeis E., Sveigaard A., Skinhoj P.;
RT "Limited protective effect of the CCR5delta32/CCR5delta32 genotype on
RT human immunodeficiency virus infection incidence in a cohort of
RT patients with hemophilia and selection for genotypic X4 virus.";
RL J. Infect. Dis. 187:215-225(2003).
DR EMBL; AY150666; AA061698.1; -.
DR GO; GO:0016021; C:integral to membrane; IEA.
DR GO; GO:0019028; C:viral capsid; IEA.
DR GO; GO:0019031; C:viral envelope; IEA.
DR GO; GO:0005198; F:structural molecule activity; IEA.
DR InterPro; IPR000777; GP120.
DR Pfam; PF00516; GP120; 1.
KW AIDS; Coat protein; Envelope protein; Glycoprotein; Transmembrane.
FT NON TER 1
FT NON TER 25
SQ SEQUENCE 25 AA; 2790 MW; CB4779D487B698D2 CRC64;

Query Match 36.6%; Score 45; DB 2; Length 25;
Best Local Similarity 50.0%; Pred. No. 5;
Matches 8; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 8 RIQRGPGRAFTVIGIKI 23
| | | | |
DB 1 RLSSGPGRVVYTTGPI 16

RESULT 9
Q9PXF1 ID Q9PXF1 PRELIMINARY; PRT; 18 AA.
AC Q9PXF1;
DT 01-MAY-2000 (TRENBLrel. 13, Created)
DT 01-MAY-2000 (TRENBLrel. 13, Last sequence update)
DT 01-MAR-2004 (TRENBLrel. 26, Last annotation update)
DE GP120 protein (Fragment).
OS Human immunodeficiency virus 1.
OC Viruses; Retroid viruses; Retroviridae; Lentivirus.
OX NCBI_TaxID=11676;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95386957; PubMed=7658059;
RA Lawoko A., Johansson B., Dash R., Falck L., Dietrich U., Pipkorn R.,
RA Nilehn B., Blomberg J.;
RT "Continuity and discontinuity in the anti-V3 IgG response of human
RT immunodeficiency virus type 1-infected persons in a cross-sectional
RT and longitudinal study using synthetic peptides.";
RL J. Infect. Dis. 172:682-690(1995).
SQ SEQUENCE 18 AA; 2047 MW; F5884C2C32F15B55 CRC64;

Query Match 31.7%; Score 39; DB 2; Length 18;
Best Local Similarity 64.3%; Pred. No. 36;
Matches 9; Conservative 1; Mismatches 2; Indels 2; Gaps 1;

QY 1 NNTKSERIQRGPG 14
| | | | |
DB 7 NNTKRG--RMTWGP 18

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Db          |||: ||| ; ||
3 NNTKGSETFRPGG 16

RESULT 12
Q78326      PRELIMINARY;          PRT;      17 AA.
ID Q78326
AC Q78326;
DT 01-NOV-1996 (TrEMBLrel. 01, Created)
DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT 01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
DE DE Immunodeficiency virus type 1, viral sample FLPAR5C (Florida patient
DE DE A), partial env cds, V5 region. (Fragment).
DE DE Human immunodeficiency virus 1.
OS Viruses; Retroviridae; Retroviridae; Lentivirus.
OC NCBI_TaxID=11676;
OX [1]
RX SEQUENCE FROM N.A.
RP MEDLINE=92271245; PubMed=1589796;
RA Ou C.-Y., Ciesielski C.A., Myers G., Bandea C.I., Luo C.C.,
RA Korber B.T.M., Mullins J.I., Schochetman G., Berkelman R.L.,
RA Economou A.N., Witte J.J., Furman L.J., Satten G.A., Curran J.W.,
RA Jaffe H.W.;
RA "Molecular epidemiology of HIV transmission in a dental practice.";
RT Science 256:1165-1171(1992).
RL [2]
RP SEQUENCE FROM N.A.
RA Zhang L.Q., Leigh-Brown A.J.;
RA Submitted (APR-1992) to the EMBL/GenBank/DBJ databases.
RL EMBL; M92111; AAA44467.1; -.
DR DR NON_TER 1 1
FT FT NON_TER 17 17
SQ SEQUENCE 17 AA; 1625 MW; 3E83A0BFD3FCA370 CRC64;

Query Match 26.88; Score 33; DB 2; Length 17;
Best Local Similarity 50.04; Pred. No. 3.5e-02;
Matches 7; Conservative 1; Mismatches 6; Indels 0; Gaps

QY 1 NNTKRSRIQGGP 14
||| ||| ||| |||
3 NNTKGSETFRPGG 16

Db          |||: ||| ; ||
3 NNTKGSETFRPGG 16

RESULT 13
Q78345      PRELIMINARY;          PRT;      17 AA.
ID Q78345
AC Q78345;
DT 01-NOV-1996 (TrEMBLrel. 01, Created)
DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT 01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
DE DE Immunodeficiency virus type 1, viral sample FLPAR5F (Florida patient
DE DE A), partial env cds, V5 region. (Fragment).
OS Human immunodeficiency virus 1.
OS Viruses; Retroviridae; Retroviridae; Lentivirus.
OC NCBI_TaxID=11676;
OX [1]
RX SEQUENCE FROM N.A.
RP MEDLINE=92271245; PubMed=1589796;
RA Ou C.-Y., Ciesielski C.A., Myers G., Bandea C.I., Luo C.C.,
RA Korber B.T.M., Mullins J.I., Schochetman G., Berkelman R.L.,
RA Economou A.N., Witte J.J., Furman L.J., Satten G.A., Curran J.W.,
RA Jaffe H.W.;
RA "Molecular epidemiology of HIV transmission in a dental practice.";
RT Science 256:1165-1171(1992).
RL [2]
RP SEQUENCE FROM N.A.
RA Zhang L.Q., Leigh-Brown A.J.;
RA Submitted (APR-1992) to the EMBL/GenBank/DBJ databases.
RL EMBL; M92114; AAA44470.1; -.
DR DR NON_TER 1 1
FT FT NON_TER 17 17
SQ SEQUENCE 17 AA; 1635 MW; 3E83A0BFD12CA370 CRC64;

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Query Match      26.0%; Score 32; DB 2; Length 17;
Best Local Similarity 50.0%; Pred. No. 5.2e+02;
Matches 7; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

OY 1 NNTKRSRIQPGG 14
    ||| :|:|:|
Db 3 NNTNGSETRPGG 16

RESULT 14
OY 1 NNTKRSRIQPGG 14
    ||| :|:|:|
Db 3 NNTNGSETRPGG 16

ID Q78378 PRELIMINARY; PRT; 17 AA.
AC Q78378;
DT 01-NOV-1996 (TReMBLrel. 01, Created)
DT 01-NOV-1996 (TReMBLrel. 01, Last sequence update)
DT 01-MAR-2004 (TReMBLrel. 26, Last annotation update)
DE Immunodeficiency virus type 1, viral sample FLBPSA (Florida patient
DE B), partial env cds, V5 region. (Fragment).
OS Human immunodeficiency virus 1.
OC Viruses; Retrovirdae; Retroviridae; Lentivirus.
OX NCBI_TaxID=11676;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=92271245; PubMed=1589796;
RA Ou C.-Y., Ciecielaki C.A., Myers G., Bandea C.I., Luo C.C.,
RA Korber B.T.M., Mullins J.I., Schochetman G., Berkman R.L.,
RA Economou A.N., Witte J.J., Furman L.J., Satten G.A., Curran J.W.,
RA Jaffe H.W.;
RT "Molecular epidemiology of HIV transmission in a dental practice.";
RL Science 256:1165-1171(1992).
RN [2]
RP SEQUENCE FROM N.A.
RA Zhang L.Q., Leigh-Brown A.J.;
RL Submitted (APR-1992) to the EMBL/GenBank/DBJ databases.
DR EMBL; M92123; AAA44493.1; -.
FT NON_TER 1
FT NON_TER 17
SQ SEQUENCE 17 AA; 1723 MW; 34757935D12CA370 CRC64;

Query Match      26.0%; Score 32; DB 2; Length 17;
Best Local Similarity 42.9%; Pred. No. 5.2e+02;
Matches 6; Conservative 3; Mismatches 5; Indels 0; Gaps 0;

OY 1 NNTKRSRIQPGG 14
    ||| :|:|:|
Db 3 NNTNETETFRPGG 16

RESULT 15
OY 1 NNTKRSRIQPGG 14
    ||| :|:|:|
Db 3 NNTNETETFRPGG 16

ID Q78381 PRELIMINARY; PRT; 17 AA.
AC Q78381;
DT 01-NOV-1996 (TReMBLrel. 01, Created)
DT 01-NOV-1996 (TReMBLrel. 01, Last sequence update)
DT 01-MAR-2004 (TReMBLrel. 26, Last annotation update)
DE Immunodeficiency virus type 1, viral sample FLBPSF (Florida patient
DE B), partial env cds, V5 region. (Fragment).
OS Human immunodeficiency virus 1.
OC Viruses; Retrovirdae; Retroviridae; Lentivirus.
OX NCBI_TaxID=11676;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=92271245; PubMed=1589796;
RA Ou C.-Y., Ciecielaki C.A., Myers G., Bandea C.I., Luo C.C.,
RA Korber B.T.M., Mullins J.I., Schochetman G., Berkman R.L.,
RA Economou A.N., Witte J.J., Furman L.J., Satten G.A., Curran J.W.,
RA Jaffe H.W.;
RT "Molecular epidemiology of HIV transmission in a dental practice.";
RL Science 256:1165-1171(1992).
RN [2]
RP SEQUENCE FROM N.A.
RA Zhang L.Q., Leigh-Brown A.J.;
RL Submitted (APR-1992) to the EMBL/GenBank/DBJ databases.

DR EMBL; M92126; AAA44496.1; -.
FT NON_TER 1
FT NON_TER 17
SQ SEQUENCE 17 AA; 1708 MW; 347570D2D12CA370 CRC64;

Query Match      25.2%; Score 31; DB 2; Length 17;
Best Local Similarity 42.9%; Pred. No. 7.6e+02;
Matches 6; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

OY 1 NNTKRSRIQPGG 14
    ||| :|:|:|
Db 3 NNTNTETFRPGG 16

RESULT 16
OY 1 NNTKRSRIQPGG 14
    ||| :|:|:|
Db 3 NNTNTETFRPGG 16

ID Q6TQT6 PRELIMINARY; PRT; 24 AA.
AC Q6TQT6;
DT 05-JUL-2004 (TReMBLrel. 27, Created)
DT 05-JUL-2004 (TReMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TReMBLrel. 27, Last annotation update)
DE YHR065Cp (Fragment).
GN Name=YHR065C;
OS Saccharomyces cerevisiae (Baker's Yeast).
OC Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
OC Saccharomycetales; Saccharomycetaceae; Saccharomycetes.
OX NCBI_TaxID=4932;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=AB972;
RA Kennedy M.C., Dietrich F.S.;
RL Submitted (SEP-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY389302; AAQ97234.1; -.
FT NON_TER 1
FT NON_TER 1
SQ SEQUENCE 24 AA; 2866 MW; 83820AB41EF59E7C CRC64;

Query Match      25.2%; Score 31; DB 2; Length 24;
Best Local Similarity 66.7%; Pred. No. 1.1e+03;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

OY 7 ERIORGPGR 15
    ||| :|:|:|
Db 1 EKIARGKGR 9

RESULT 17
OY 7 ERIORGPGR 15
    ||| :|:|:|
Db 1 EKIARGKGR 9

ID Q78328 PRELIMINARY; PRT; 17 AA.
AC Q78328;
DT 01-NOV-1996 (TReMBLrel. 01, Created)
DT 01-NOV-1996 (TReMBLrel. 01, Last sequence update)
DT 01-OCT-2002 (TReMBLrel. 22, Last annotation update)
DE Immunodeficiency virus type 1, viral sample FLPARSE (Florida patient
DE A), partial env cds, V5 region. (Fragment).
OS Human immunodeficiency virus 1.
OC Viruses; Retrovirdae; Retroviridae; Lentivirus.
OX NCBI_TaxID=11676;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=92271245; PubMed=1589796;
RA Ou C.-Y., Ciecielaki C.A., Myers G., Bandea C.I., Luo C.C.,
RA Korber B.T.M., Mullins J.I., Schochetman G., Berkman R.L.,
RA Economou A.N., Witte J.J., Furman L.J., Satten G.A., Curran J.W.,
RA Jaffe H.W.;
RT "Molecular epidemiology of HIV transmission in a dental practice.";
RL Science 256:1165-1171(1992).
RN [2]
RP SEQUENCE FROM N.A.
RA Zhang L.Q., Leigh-Brown A.J.;
RL Submitted (APR-1992) to the EMBL/GenBank/DBJ databases.
DR EMBL; M92113; AAA44469.1; -.
FT NON_TER 1
FT NON_TER 17

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SQ SEQUENCE 17 AA; 1750 MW; 346FDBB802CA370 CRC64;  
 Query Match 24.8%; Score 30.5; DB 2; Length 17;  
 Best Local Similarity 53.3%; Pred. No. 9.3e+02;  
 Matches 8; Conservative 2; Mismatches 4; Indels 1; Gaps 1;  
 QY 1 NNTKRSERIQRGPGR 15  
 |||: |||: |||  
 Db 3 NNTKGSETRPGG-GR 16  
 |||: |||: |||  
 RESULT 18  
 Q78323 ID Q78323 PRELIMINARY; PRT; 17 AA.  
 AC Q78323;  
 DT 01-NOV-1996 (TREMBlrel. 01, Created)  
 DT 01-NOV-1996 (TREMBlrel. 01, Last sequence update)  
 DT 01-OCT-2002 (TREMBlrel. 22, Last annotation update)  
 DE Immunodeficiency virus type 1, viral sample FLPARSA (Florida patient  
 DE A), partial env cds, V5 region. (Fragment).  
 OS Human immunodeficiency virus 1.  
 OC Viruses; Retrovirdae; Retroviridae; Lentivirus.  
 OX NCBI\_TaxID=11676;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=92271245; PubMed=1589796;  
 RA Ou C.-Y., Ciecielski C.A., Myers G., Bandea C.I., Luo C.C.,  
 RA Korber B.T.M., Mullins J.I., Schochetman G., Berkman R.L.,  
 RA Economou A.N., Witte J.J., Furman L.J., Satten G.A., Curran J.W.,  
 RA Jaffe H.W.;  
 RT "Molecular epidemiology of HIV transmission in a dental practice.";  
 RL Science 256:1165-1171(1992).  
 RN [2]  
 RP SEQUENCE FROM N.A.  
 RA Zhang L.Q., Leigh-Brown A.J.;  
 RL Submitted (APR-1992) to the EMBL/GenBank/DBJ databases.  
 DR EMBL; M92109; AAA44465.1; -;  
 FT NON TER 1  
 FT NON TER 17  
 SQ SEQUENCE 17 AA; 1649 MW; 3B857BBFD12CA370 CRC64;  
 Query Match 23.6%; Score 29; DB 2; Length 17;  
 Best Local Similarity 42.9%; Pred. No. 1.7e+03;  
 Matches 6; Conservative 2; Mismatches 6; Indels 0; Gaps 0;  
 QY 1 NNTKRSERIQRGPGR 14  
 |||: |||: |||  
 Db 3 NNTNGTETFRPGG 16  
 |||: |||: |||  
 RESULT 19  
 Q78327 ID Q78327 PRELIMINARY; PRT; 17 AA.  
 AC Q78327;  
 DT 01-NOV-1996 (TREMBlrel. 01, Created)  
 DT 01-NOV-1996 (TREMBlrel. 01, Last sequence update)  
 DT 01-MAR-2004 (TREMBlrel. 26, Last annotation update)  
 DE Immunodeficiency virus type 1, viral sample FLPARSD (Florida patient  
 DE A), partial env cds, V5 region. (Fragment).  
 OS Human immunodeficiency virus 1.  
 OC Viruses; Retrovirdae; Retroviridae; Lentivirus.  
 OX NCBI\_TaxID=11676;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=92271245; PubMed=1589796;  
 RA Ou C.-Y., Ciecielski C.A., Myers G., Bandea C.I., Luo C.C.,  
 RA Korber B.T.M., Mullins J.I., Schochetman G., Berkman R.L.,  
 RA Economou A.N., Witte J.J., Furman L.J., Satten G.A., Curran J.W.,  
 RA Jaffe H.W.;  
 RT "Molecular epidemiology of HIV transmission in a dental practice.";  
 RL Science 256:1165-1171(1992).  
 RN [2]  
 RP SEQUENCE FROM N.A.

RA Zhang L.Q., Leigh-Brown A.J.;  
 RL Submitted (APR-1992) to the EMBL/GenBank/DBJ databases.  
 DR EMBL; M92112; AAA44468.1; -;  
 FT NON TER 1  
 FT NON TER 17  
 SQ SEQUENCE 17 AA; 1651 MW; 34757BBFD12CA370 CRC64;  
 Query Match 23.6%; Score 29; DB 2; Length 17;  
 Best Local Similarity 42.9%; Pred. No. 1.7e+03;  
 Matches 6; Conservative 2; Mismatches 6; Indels 0; Gaps 0;  
 QY 1 NNTKRSERIQRGPGR 14  
 |||: |||: |||  
 Db 3 NNTNGTETFRPGG 16  
 |||: |||: |||  
 RESULT 20  
 Q78380 ID Q78380 PRELIMINARY; PRT; 17 AA.  
 AC Q78380;  
 DT 01-NOV-1996 (TREMBlrel. 01, Created)  
 DT 01-NOV-1996 (TREMBlrel. 01, Last sequence update)  
 DT 01-MAR-2004 (TREMBlrel. 26, Last annotation update)  
 DE Immunodeficiency virus type 1, viral sample FLPRSE (Florida patient  
 DE B), partial env cds, V5 region. (Fragment).  
 OS Human immunodeficiency virus 1.  
 OC Viruses; Retrovirdae; Retroviridae; Lentivirus.  
 OX NCBI\_TaxID=11676;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=92271245; PubMed=1589796;  
 RA Ou C.-Y., Ciecielski C.A., Myers G., Bandea C.I., Luo C.C.,  
 RA Korber B.T.M., Mullins J.I., Schochetman G., Berkman R.L.,  
 RA Economou A.N., Witte J.J., Furman L.J., Satten G.A., Curran J.W.,  
 RA Jaffe H.W.;  
 RT "Molecular epidemiology of HIV transmission in a dental practice.";  
 RL Science 256:1165-1171(1992).  
 RN [2]  
 RP SEQUENCE FROM N.A.  
 RA Zhang L.Q., Leigh-Brown A.J.;  
 RL Submitted (APR-1992) to the EMBL/GenBank/DBJ databases.  
 DR EMBL; M92125; AAA44495.1; -;  
 FT NON TER 1  
 FT NON TER 17  
 SQ SEQUENCE 17 AA; 1651 MW; 34757BBFD12CA370 CRC64;  
 Query Match 23.6%; Score 29; DB 2; Length 17;  
 Best Local Similarity 42.9%; Pred. No. 1.7e+03;  
 Matches 6; Conservative 2; Mismatches 6; Indels 0; Gaps 0;  
 QY 1 NNTKRSERIQRGPGR 14  
 |||: |||: |||  
 Db 3 NNTNGTETFRPGG 16  
 |||: |||: |||  
 RESULT 21  
 Q6U2M7 ID Q6U2M7 PRELIMINARY; PRT; 22 AA.  
 AC Q6U2M7;  
 DT 05-JUL-2004 (TREMBlrel. 27, Created)  
 DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)  
 DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)  
 DE Galactinol synthase (EC 2.4.1.123) (Fragment).  
 GN Name=GAS1;  
 OS Sechium edule.  
 OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
 OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;  
 OC eurosids I; Cucurbitales; Cucurbitaceae; Sechium.  
 OX NCBI\_TaxID=184140;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=22975109; PubMed=14526110; DOI=10.1104/pp.103.027714;  
 RA Ayre B.G., Blair J.E., Turgeon R.;

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RT "Functional and phylogenetic analyses of a conserved regulatory
RL program in the phloem of minor veins.";
RL Plant Physiol. 133:1229-1239(2003).
DR EMBL; AY379782; AAQ74884.1; -.
DR GO; GO:0047216; P:inositol 3-alpha-galactosyltransferase acti. .; IEA.
DR GO; GO:0016757; P:transferase activity, transferring glycosyl. .; IEA.
KW Glycosyltransferase; Transferase.
FT NON TER 22
SQ SEQUENCE 22 AA; 2295 MW; A6673B5BFD06430C CRC64;

Query Match 23.6%; Score 29; DB 2; Length 22;
Best Local Similarity 85.7%; Pred. No. 2.2e+03;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 13 PGRAFTV 19
Db 16 PGRAFTV 22

RESULT 22
Q9ZG65 PRELIMINARY; PRT; 18 AA.
AC Q9ZG65;
DT 01-MAY-1999 (TrEMBLrel. 10, Created)
DT 01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
DT 01-MAY-1999 (TrEMBLrel. 10, Last annotation update)
DE Orotidine-5'-phosphate decarboxylase (Fragment).
GN Name=pyrF;
OS Chlamydia trachomatis.
OC Bacteria; Chlamydiae; Chlamydiales; Chlamydiaceae; Chlamydia.
OX NCBI_TaxID=813;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=L2 434B;
RA Wang L., Steenburg S.D., Zheng Y., Larsen S.H.;
RL Submitted (AUG-1998) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF087291; AAD04068.1; -.
FT NON TER 1
FT NON TER 18
SQ SEQUENCE 18 AA; 2026 MW; CB911767583AF4E3 CRC64;

Query Match 22.8%; Score 28; DB 2; Length 18;
Best Local Similarity 50.0%; Pred. No. 2.6e+03;
Matches 5; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

Qy 2 NTRKSERIQ 11
Db 8 NTRNSSVVR 17

RESULT 23
Q9UCK9 PRELIMINARY; PRT; 16 AA.
AC Q9UCK9;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
DE Serum amyloid A isotype 2 alpha protein (Serum amyloid A protein)
(Fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE.
RX MEDLINE=93099171; PubMed=1463770; DOI=10.1016/0925-4439(92)90068-X;
RA Baba S., Takahashi T., Kasama T., Shirasawa H.;
RL "Identification of two novel amyloid A protein subsets coexisting in
an individual patient of AA-amyloidosis.";
RT Hum. Mutat. 3:321-323(1994).
RL Biochim. Biophys. Acta 1180:195-200(1992).
DR EMBL; A27902; YHUA.
FT PIR; A27902; YHUA.
DR GO; GO:0006953; P:acute-phase response; IEA.
DR GO; GO:0006953; P:acute-phase response; IEA.
```

```
DR InterPro; IPR000096; Serum_amyloid_A.
DR Pfam; PF00277; SAA; 1.
SQ SEQUENCE 16 AA; 1612 MW; 1CAB4F077C9C8CC1 CRC64;

Query Match 22.0%; Score 27; DB 2; Length 16;
Best Local Similarity 71.4%; Pred. No. 3.4e+03;
Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 11 RGPGRAF 17
Db 1 RGPGGAW 7

RESULT 24
Q9UCL0 PRELIMINARY; PRT; 16 AA.
AC Q9UCL0;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
DE Serum amyloid A isotype 1 protein (Serum amyloid A protein)
(Fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE.
RX MEDLINE=93099171; PubMed=1463770; DOI=10.1016/0925-4439(92)90068-X;
RA Baba S., Takahashi T., Kasama T., Shirasawa H.;
RL "Identification of two novel amyloid A protein subsets coexisting in
an individual patient of AA-amyloidosis.";
RT Biochim. Biophys. Acta 1180:195-200(1992).
DR GO; GO:0006953; P:acute-phase response; IEA.
DR InterPro; IPR000096; Serum_amyloid_A.
DR Pfam; PF00277; SAA; 1.
SQ SEQUENCE 16 AA; 1585 MW; 1CAB41E77C839CC1 CRC64;

Query Match 22.0%; Score 27; DB 2; Length 16;
Best Local Similarity 71.4%; Pred. No. 3.4e+03;
Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 11 RGPGRAF 17
Db 1 RGPGGAW 7

RESULT 25
Q16228 PRELIMINARY; PRT; 17 AA.
AC Q16228;
DT 01-NOV-1996 (TrEMBLrel. 01, Created)
DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT 01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
DE Peripherin (Fragment).
GN Name=rd5;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=94290510; PubMed=8019570;
RA Gruning G., Millan J.M., Meins M., Beneyto M., Caballero M.,
RA Apfelsiedt-Sylla E., Bosch R., Zrenner E., Prieto F., Gal A.;
RT "Mutations in the human peripherin/RDS gene associated with autosomal
dominant retinitis pigmentosa.";
RL Hum. Mutat. 3:321-323(1994).
DR EMBL; S73627; AAB31191.1; -.
FT NON TER 17
FT NON TER 17
SQ SEQUENCE 17 AA; 2342 MW; 96828BAG95A9D1EB CRC64;
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Query Match      22.0%; Score 27; DB 2; Length 17;
Best Local Similarity 60.0%; Pred. No. 3.6e+03;
Matches 6; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 8 RIQGRGPRAP 17
DB 5 RACRRGPRP 14

RESULT 26
Q6EML0 PRELIMINARY; PRT; 19 AA.
AC Q6EML0;
DT 25-OCT-2004 (TREMBlrel. 28, Created)
DT 25-OCT-2004 (TREMBlrel. 28, Last sequence update)
DT 25-OCT-2004 (TREMBlrel. 28, Last annotation update)
DE B-creatine kinase (Fragment).
OS Meleagris gallopavo (Common turkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Meleagris.
OX NCBI_TaxID=9103;
RN [1]
RP SEQUENCE FROM N.A.
RX PubMed=15140948; DOI=10.1093/molbev/msh157;
RA Axelsson E., Smith N.G., Sundstrom H., Berlin S., Ellegren H.;
RT "Male-biased mutation rate and divergence in autosomal, z-linked and
RT w-linked introns of chicken and Turkey.";
RL Mol. Biol. Evol. 21:1538-1547(2004).
DR EMBL; AV139863; AAN74867.1; -.
DR GO; GO:0016301; F:kinase activity; IEA.
DR GO; GO:0016772; F:transferase activity, transferring phosphor. .; IEA.
DR InterPro; IPR000749; ATP-gua_Ptrans.
DR Pfam; PF02807; ATP-gua_Ptrans; 1.
KW Kinase.
FT NON_TER 1
FT NON_TER 19
SQ SEQUENCE 19 AA; 1985 MW; 79B98E106D048680 CRC64;

Query Match      22.0%; Score 27; DB 2; Length 19;
Best Local Similarity 47.1%; Pred. No. 4.1e+03;
Matches 8; Conservative 2; Mismatches 3; Indels 4; Gaps 2;

QY 9 IQRG---PGRAPV-TIG 21
DB 1 IOTGVDPGHPFIMTVG 17

RESULT 27
Q6EML1 PRELIMINARY; PRT; 19 AA.
AC Q6EML1;
DT 25-OCT-2004 (TREMBlrel. 28, Created)
DT 25-OCT-2004 (TREMBlrel. 28, Last sequence update)
DT 25-OCT-2004 (TREMBlrel. 28, Last annotation update)
DE B-creatine kinase (Fragment).
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RX PubMed=15140948; DOI=10.1093/molbev/msh157;
RA Axelsson E., Smith N.G., Sundstrom H., Berlin S., Ellegren H.;
RT "Male-biased mutation rate and divergence in autosomal, z-linked and
RT w-linked introns of chicken and Turkey.";
RL Mol. Biol. Evol. 21:1538-1547(2004).
DR EMBL; AY139862; AAN74866.1; -.
DR GO; GO:0016301; F:kinase activity; IEA.
DR GO; GO:0016772; F:transferase activity, transferring phosphor. .; IEA.
DR InterPro; IPR000749; ATP-gua_Ptrans.
DR Pfam; PF02807; ATP-gua_Ptrans; 1.
KW Kinase.
```

```
FT NON_TER 1
FT NON_TER 19
SQ SEQUENCE 19 AA; 1985 MW; 79B98E106D048680 CRC64;

Query Match      22.0%; Score 27; DB 2; Length 19;
Best Local Similarity 47.1%; Pred. No. 4.1e+03;
Matches 8; Conservative 2; Mismatches 3; Indels 4; Gaps 2;

QY 9 IQRG---PGRAPV-TIG 21
DB 1 IOTGVDPGHPFIMTVG 17

RESULT 28
Q224C7 PRELIMINARY; PRT; 22 AA.
ID Q924C7;
AC Q924C7;
DT 01-DEC-2001 (TREMBlrel. 19, Created)
DT 01-DEC-2001 (TREMBlrel. 19, Last sequence update)
DT 01-JUN-2003 (TREMBlrel. 24, Last annotation update)
DE Glucagon-like peptide-2 receptor (Fragment).
GN Name=Glpr;
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RX STRAIN=129/SVJ;
RX MEDLINE=21292988; PubMed=11262390; DOI=10.1074/jbc.M009382200;
RA Lovshin J.A., Estall J., Yusta B., Brown T.J., Drucker D.J.;
RT "Glucagon-like peptide (GLP)-2 action in the murine central nervous
RT system is enhanced by elimination of GLP-1 receptor signaling.";
RL J Biol. Chem. 276:21489-21499(2001).
DR EMBL; AF338224; AAK63043.1; -.
DR MGD; MGI:2136733; Glpr.
DR GO; GO:0016021; C:integral to membrane; TAS.
DR GO; GO:0004967; F:glucagon receptor activity; TAS.
DR GO; GO:0007186; P:G-protein coupled receptor protein signalin. .; TAS.
KW Receptor.
FT NON_TER 22
FT NON_TER 22
SQ SEQUENCE 22 AA; 2526 MW; 2C5BF53DCCD425C9 CRC64;

Query Match      22.0%; Score 27; DB 2; Length 22;
Best Local Similarity 44.4%; Pred. No. 4.8e+03;
Matches 4; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 12 GPGRAFVTI 20
DB 6 GPGTFLSL 14

RESULT 29
Q94781 PRELIMINARY; PRT; 23 AA.
ID Q94781;
AC Q94781;
DT 01-FEB-1997 (TREMBlrel. 02, Created)
DT 01-FEB-1997 (TREMBlrel. 02, Last sequence update)
DT 01-JAN-1999 (TREMBlrel. 09, Last annotation update)
DE Histone H2A (Fragment).
OS Trypanosoma cruzi.
OC Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae; Trypanosoma.
OX NCBI_TaxID=5693;
RN [1]
RP SEQUENCE FROM N.A.
RX STRAIN=Berkley;
RA Tanaka T., Tanaka M.;
RL Submitted (AUG-1996) to the EMBL/GenBank/DBJ databases.
DR EMBL; D87227; BAA13318.1; -.
FT NON_TER 1
FT NON_TER 1
SQ SEQUENCE 23 AA; 2790 MW; 12E9ED7592E52045 CRC64;

Query Match      22.0%; Score 27; DB 2; Length 23;
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Best Local Similarity 46.2%; Pred. No. 5e+03;
Matches 6; Conservative 3; Mismatches 4; Indels 0; Gaps 0;

Qy 4 RKSERIQRGPG 16
Db 9 RDKKRGKRGRA 21

RESULT 30
O11890
ID O11890 PRELIMINARY; PRT; 25 AA.
AC O11890;
DT 01-JUL-1997 (TReMBLrel. 04, Created)
DT 01-JUL-1997 (TReMBLrel. 04, Last sequence update)
DT 01-DEC-2001 (TReMBLrel. 19, Last annotation update)
DE Polyprotein (Fragment).
OS GB virus C/Hepatitis G virus.
OC Viruses; ssRNA positive-strand viruses, no DNA stage; Flaviviridae;
OC GBV-C/HGV group.
OX NCBI_TaxID=54290;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=97323271; PubMed=9179760;
RX DOI=10.1002/(SICI)1096-9071(199706)52:2<149::AID-JMV5>3.3.CO;2-N;
RA Gonzalez-Perez M.A., Norder H., Bergstrom A., Lopez E., Visona K.A.,
RA Magnus L.O.;
RT "High prevalence of GB virus C strains genetically related to strains
RT with Asian origin in Nicaraguan hemophilic."
RL J. Med. Virol. 52:149-155(1997).
DR EMBL; U86114; AA858558.1; -.
KW Polyprotein.
FT NON_TER 25
SQ SEQUENCE 25 AA; 2800 MW; B67CADD5DBB77BF6 CRC64;

Query Match 22.0%; Score 27; DB 2; Length 25;
Best Local Similarity 45.5%; Pred. No. 5.4e+03;
Matches 5; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

Qy 4 RKSERIQRGPG 14
Db 10 RRVDKQWGP 20

RESULT 31
O11891
ID O11891 PRELIMINARY; PRT; 25 AA.
AC O11891;
DT 01-JUL-1997 (TReMBLrel. 04, Created)
DT 01-JUL-1997 (TReMBLrel. 04, Last sequence update)
DT 01-DEC-2001 (TReMBLrel. 19, Last annotation update)
DE Polyprotein (Fragment).
OS GB virus C/Hepatitis G virus.
OC Viruses; ssRNA positive-strand viruses, no DNA stage; Flaviviridae;
OC GBV-C/HGV group.
OX NCBI_TaxID=54290;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=97323271; PubMed=9179760;
RX DOI=10.1002/(SICI)1096-9071(199706)52:2<149::AID-JMV5>3.3.CO;2-N;
RA Gonzalez-Perez M.A., Norder H., Bergstrom A., Lopez E., Visona K.A.,
RA Magnus L.O.;
RT "High prevalence of GB virus C strains genetically related to strains
RT with Asian origin in Nicaraguan hemophilic."
RL J. Med. Virol. 52:149-155(1997).
DR EMBL; U86115; AA858559.1; -.
KW Polyprotein.
FT NON_TER 25
SQ SEQUENCE 25 AA; 2872 MW; B67E75F5C0B77BF6 CRC64;

Query Match 22.0%; Score 27; DB 2; Length 25;
Best Local Similarity 45.5%; Pred. No. 5.4e+03;
Matches 5; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

Qy 4 RKSERIQRGPG 14
Db 10 RRVDKQWGP 20

RESULT 32
O11893
ID O11893 PRELIMINARY; PRT; 25 AA.
AC O11893;
DT 01-JUL-1997 (TReMBLrel. 04, Created)
DT 01-JUL-1997 (TReMBLrel. 04, Last sequence update)
DT 01-DEC-2001 (TReMBLrel. 19, Last annotation update)
DE Polyprotein (Fragment).
OS GB virus C/Hepatitis G virus.
OC Viruses; ssRNA positive-strand viruses, no DNA stage; Flaviviridae;
OC GBV-C/HGV group.
OX NCBI_TaxID=54290;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=97323271; PubMed=9179760;
RX DOI=10.1002/(SICI)1096-9071(199706)52:2<149::AID-JMV5>3.3.CO;2-N;
RA Gonzalez-Perez M.A., Norder H., Bergstrom A., Lopez E., Visona K.A.,
RA Magnus L.O.;
RT "High prevalence of GB virus C strains genetically related to strains
RT with Asian origin in Nicaraguan hemophilic."
RL J. Med. Virol. 52:149-155(1997).
DR EMBL; U86117; AA858561.1; -.
KW Polyprotein.
FT NON_TER 25
SQ SEQUENCE 25 AA; 2872 MW; B67E75F5C0B77BF6 CRC64;

Query Match 22.0%; Score 27; DB 2; Length 25;
Best Local Similarity 45.5%; Pred. No. 5.4e+03;
Matches 5; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

Qy 4 RKSERIQRGPG 14
Db 10 RRVDKQWGP 20

RESULT 33
O7M1W9
ID O7M1W9 PRELIMINARY; PRT; 14 AA.
AC O7M1W9;
DT 01-MAR-2004 (TReMBLrel. 26, Created)
DT 01-MAR-2004 (TReMBLrel. 26, Last sequence update)
DT 01-MAR-2004 (TReMBLrel. 26, Last annotation update)
DE Porin por1 (Fragment).
OS Arabidopsis thaliana (Mouse-ear cress).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;
OC eurosids II; Brassicales; Brassicaceae; Arabidopsids.
OX NCBI_TaxID=3702;
RN [1]
RP SEQUENCE.
RA Kamo M., Kawakami T., Miyatake N., Tsugita A.;
RL Submitted (JUL-1994) to the PIR data bank.
DR PIR; PA0045; PA0045.
FT NON_TER 1
FT NON_TER 14
SQ SEQUENCE 14 AA; 1546 MW; 0728ED7FB3BE8FBB CRC64;

Query Match 21.5%; Score 26.5; DB 2; Length 14;
Best Local Similarity 50.0%; Pred. No. 3.6e+03;
Matches 6; Conservative 2; Mismatches 3; Indels 1; Gaps 1;

Qy 11 RGPGRFVTTGK 22
Db 2 KGPGLYTEIGK 12

RESULT 34
Q7PE81
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ID Q7PE81 PRELIMINARY; PRT; 14 AA.
AC Q7PE81;
DT 01-MAR-2004 (TREMBlrel. 26, Created)
DT 01-MAR-2004 (TREMBlrel. 26, Last sequence update)
DT 01-MAR-2004 (TREMBlrel. 26, Last annotation update)
DE ENSANGP0000024647.
GN Name=ENSANGG0000020916;
OS Anopheles gambiae str. PEST.
OC Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea; Anopheles.
ON NCBI_TaxID=180454;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=PEST;
RA Anopheles Genome Sequencing Consortium;
RL Submitted (APR-2003) to the EMBL/GenBank/DBJ databases.
CC -!- CAUTION: The sequence shown here is derived from an
CC EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is
CC preliminary data.
DR EMBL; AAAB01004344; EAA45843.1; --
SQ SEQUENCE 14 AA; 1652 MW; 4A8A0A1AEC3F7FD3 CRC64;

Query Match 21.1%; Score 26; DB 2; Length 14;
Best Local Similarity 45.5%; Pred. No. 4.4e+03;
Matches 5; Conservative 1; Mismatches 5; Indels 0; Gaps 0;

Qy 13 PGRAFTVITGI 23
Db 2 PERCFKQIGSV 12

RESULT 35
ID NF41 NAEFO STANDARD; PRT; 15 AA.
AC P83729;
DT 29-MAR-2004 (Rel. 43, Created)
DT 29-MAR-2004 (Rel. 43, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Unknown protein NF041 from 2D-PAGE (Fragment).
OS Naegleria fowleri.
OC Eukaryota; Heterolobosea; Schizopyrenida; Vahlkampfiidae; Naegleria.
ON NCBI_TaxID=5763;
RN [1]
RP SEQUENCE.
RC STRAIN=Nf 66;
RA Omura M., Furushima-Shinogawara R., Izumiyama S., Endo T.;
RT "Comparative study of protein profiles on pathogenic and nonpathogenic
RT Naegleria species by 2D-PAGE."
RL J. Eukaryot. Microbiol. 0:0-0(2004).
CC -!- MISCELLANEOUS: On the 2D-gel the determined pI of this unknown
CC protein is: 5.9, its MW is: 47.0 kDa.
KW Direct protein sequencing.
FT NON_TER 15
FT NON_TER 15
SQ SEQUENCE 15 AA; 1704 MW; C70F7D308AEC51B9 CRC64;

Query Match 21.1%; Score 26; DB 1; Length 15;
Best Local Similarity 50.0%; Pred. No. 4.7e+03;
Matches 6; Conservative 1; Mismatches 5; Indels 0; Gaps 0;

Qy 2 NTRKSERIQRP 13
Db 1 DTHKSEIAHRQP 12

RESULT 36
ID Q9UCT3 PRELIMINARY; PRT; 17 AA.
AC Q9UCT3;
DT 01-MAY-2000 (TREMBlrel. 13, Created)
DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)
DT 01-JUN-2003 (TREMBlrel. 24, Last annotation update)
DE ALZHEIMER'S beta-amyloid precursor protein, kunitz-type
DE inhibitor, neutrophil elastase inhibitor, PI-VAL-APP-KD
```

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DE (Fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
ON NCBI_TaxID=9606;
RN [1]
RP SEQUENCE.
RX MEDLINE=92041969; PubMed=1939150;
RA Sinha S., Knops J., Esch F., Moyer E.D., Oltersdorf T.;
RT "Conversion of the Alzheimer's beta-amyloid precursor protein (APP)
RT Kunitz domain into a potent human neutrophil elastase inhibitor.";
RL J. Biol. Chem. 266:21011-21013(1991).
DR GO; GO:0004867; P:serine-type endopeptidase inhibitor activity; NAS.
DR GO; GO:0030162; P:regulation of proteolysis and peptidolysis; NAS.
FT NON_TER 1
FT NON_TER 17
SQ SEQUENCE 17 AA; 1778 MW; F0CCDC28D6712BA CRC64;

Query Match 21.1%; Score 26; DB 2; Length 17;
Best Local Similarity 38.5%; Pred. No. 5.3e+03;
Matches 5; Conservative 3; Mismatches 5; Indels 0; Gaps 0;

Qy 6 SERIQRGFGRAV 18
Db 5 SEQAETGFXVAMI 17

RESULT 37
ID Q9RSN0 PRELIMINARY; PRT; 17 AA.
AC Q9RSN0;
DT 01-MAY-2000 (TREMBlrel. 13, Created)
DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)
DT 01-OCT-2003 (TREMBlrel. 25, Last annotation update)
DE Gamma-glutamyltranspeptidase heavy subunit (EC 2.3.2.2) (Fragment).
OS Bacillus subtilis.
OC Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.
ON NCBI_TaxID=1423;
RN [1]
RP SEQUENCE.
RX MEDLINE=92144110; PubMed=1371053;
RA Ogawa Y., Hosoyama H., Hamano M., Motai H.;
RL Agric. Biol. Chem. 55:2971-2977(1991).
DR GO; GO:0003840; F:gamma-Glutamyltransferase activity; IEA.
SQ SEQUENCE 17 AA; 1810 MW; 2619B7D40C958BEB CRC64;

Query Match 21.1%; Score 26; DB 2; Length 17;
Best Local Similarity 57.1%; Pred. No. 5.3e+03;
Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 18 VTICKIG 24
Db 6 VDVGKVG 12

RESULT 38
ID Q6JCN3 PRELIMINARY; PRT; 20 AA.
AC Q6JCN3;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 25-OCT-2004 (TREMBlrel. 28, Last annotation update)
DE Afac (Fragment) (Fragment).
OS Escherichia coli.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC Enterobacteriaceae; Escherichia.
ON NCBI_TaxID=562;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=DAEC18, DAEC19, DAEC213, DAECT14, DAEC7, DAEC5, DAEC20,
RC DAEC162, DAECT2b, DAECT11a, DAEC11b, DAEC218, DAECT19, EC7372,
RC ECOR37, DAEC9, ECOR50, IH11128, C1845, and ECOR64;
RX PubMed=15014151; DOI=10.1093/molbev/msh118;
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RA Escobar-Paramo P., Clermont O., Blanc-Potard A.B., Bui H.,  
 RA Le Bouguenec C., Denamur E.;  
 RT "A Specific Genetic Background Is Required for Acquisition and  
 RT Expression of Virulence Factors in *Escherichia coli*.";  
 RL Mol. Biol. Evol. 21:1085-1094(2004).  
 DR EMBL; AY525515; AAT00550.1; -  
 DR EMBL; AY525516; AAT00552.1; -  
 DR EMBL; AY525517; AAT00554.1; -  
 DR EMBL; AY525518; AAT00556.1; -  
 DR EMBL; AY525519; AAT00558.1; -  
 DR EMBL; AY525520; AAT00560.1; -  
 DR EMBL; AY525521; AAT00562.1; -  
 DR EMBL; AY525522; AAT00564.1; -  
 DR EMBL; AY525523; AAT00566.1; -  
 DR EMBL; AY525524; AAT00568.1; -  
 DR EMBL; AY525525; AAT00570.1; -  
 DR EMBL; AY525526; AAT00572.1; -  
 DR EMBL; AY525527; AAT00574.1; -  
 DR EMBL; AY525528; AAT00576.1; -  
 DR EMBL; AY525529; AAT00578.1; -  
 DR EMBL; AY525530; AAT00580.1; -  
 DR EMBL; AY525531; AAT00582.1; -  
 DR EMBL; AY525532; AAT00584.1; -  
 DR EMBL; AY525533; AAT00586.1; -  
 DR EMBL; AY525534; AAT00588.1; -  
 DR EMBL; AY525514; AAT00548.1; -  
 FT NON\_TER 1  
 SQ SEQUENCE 20 AA; 2282 MW; A3406B687822556D CRC64;

Query Match 21.1%; Score 26; DB 2; Length 20;  
 Best Local Similarity 40.0%; Pred. No. 6.3e+03;  
 Matches 4; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

Qy 10 ORGPGRAFTV 19  
 Db 6 EKGPAGIFLT 15

RESULT 39  
 Q9R4H4  
 ID Q9R4H4 PRELIMINARY; PRT; 20 AA.  
 AC Q9R4H4;  
 DT 01-MAY-2000 (TReMBLrel. 13, Created)  
 DT 01-MAY-2000 (TReMBLrel. 13, Last sequence update)  
 DT 01-OCT-2003 (TReMBLrel. 25, Last annotation update)  
 DE Sulfite reductase 50 kDa alpha subunit (EC 1.8.99.3) (Fragment).  
 OS Desulfovibrio desulfuricans.  
 OC Bacteria; Proteobacteria; Deltaproteobacteria; Desulfovibrionales;  
 OC Desulfovibrionaceae; Desulfovibrio.  
 OX NCBI\_TaxID=876;  
 RN [1]  
 RP SEQUENCE.  
 EX MEDLINE=96085152; PubMed=8521853;  
 RA Steuber J., Arendsen A.F., Hagen W.R., Kroneck P.M.;  
 RT "Molecular properties of the dissimilatory sulfite reductase from  
 RT Desulfovibrio desulfuricans (Essex) and comparison with the enzyme  
 RT from Desulfovibrio vulgaris (Hildenborough).";  
 RL Eur. J. Biochem. 233:873-879(1995).  
 DR PIR; S63490; S63490.  
 DR GO; GO:0018551; F:hydrogensulfite reductase activity; IEA.  
 SQ SEQUENCE 20 AA; 2193 MW; F939E03B6E355135 CRC64;

Query Match 21.1%; Score 26; DB 2; Length 20;  
 Best Local Similarity 33.3%; Pred. No. 6.3e+03;  
 Matches 4; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

Qy 7 ERIQPGRAFY 18  
 Db 9 DQLESGPWPSFV 20

RESULT 40  
 Q95KS4

ID Q95KS4 PRELIMINARY; PRT; 21 AA.  
 AC Q95KS4;  
 DT 01-DEC-2001 (TReMBLrel. 19, Created)  
 DT 01-DEC-2001 (TReMBLrel. 19, Last sequence update)  
 DT 01-DEC-2001 (TReMBLrel. 19, Last annotation update)  
 DE DAP12 protein (Fragment).  
 GN Name=dap12; (Sheep).  
 OS Ovis aries (Sheep).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
 OC Caprinae; Ovis.  
 OX NCBI\_TaxID=9940;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=Peripheral blood;  
 RA Ellis S.A., Staines K.A.;  
 RL Submitted (NOV-2001) to the EMBL/GenBank/DBJ databases.  
 DR EMBL; AJ419229; CAD11671.1; -  
 FT NON\_TER 1  
 FT NON\_TER 21  
 SQ SEQUENCE 21 AA; 2316 MW; BE2E264A4CD38D6D CRC64;

Query Match 21.1%; Score 26; DB 2; Length 21;  
 Best Local Similarity 54.5%; Pred. No. 6.7e+03;  
 Matches 6; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

Qy 9 IORGPGRAFTV 19  
 Db 5 VPRGRGAJEVT 15

RESULT 41  
 Q6RCK2  
 ID Q6RCK2 PRELIMINARY; PRT; 21 AA.  
 AC Q6RCK2;  
 DT 05-JUL-2004 (TReMBLrel. 27, Created)  
 DT 05-JUL-2004 (TReMBLrel. 27, Last sequence update)  
 DT 05-JUL-2004 (TReMBLrel. 27, Last annotation update)  
 DE Catechol 2,3-dioxygenase (Fragment).  
 OS Pseudomonas putida.  
 OC Bacteria; Proteobacteria; Gammaproteobacteria; Pseudomonadales;  
 OC Pseudomonadaceae; Pseudomonas.  
 OX NCBI\_TaxID=303;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC STRAIN=MT15;  
 RA Hendrickx B., Junca H., Vosahlova J., Faber F., Lindner A., Ruegg I.,  
 RA Bucheli-Witschel M., Egli T., Mau M., Schlemann M., Brennerova M.,  
 RA Brenner V., Pieper D., Top E., Dejonghe W., Bastiaens L.,  
 RA Springsael D.;  
 RL Submitted (DEC-2003) to the EMBL/GenBank/DBJ databases.  
 DR EMBL; AY504985; AAS46984.1; -  
 DR GO; GO:0016702; F:oxidoreductase activity, acting on single d. . .; IEA.  
 KW Dioxygenase.  
 FT NON\_TER 1  
 FT NON\_TER 21  
 SQ SEQUENCE 21 AA; 2191 MW; 4200125E64F0F0DE CRC64;

Query Match 21.1%; Score 26; DB 2; Length 21;  
 Best Local Similarity 50.0%; Pred. No. 6.7e+03;  
 Matches 7; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

Qy 9 IORGPGRAFTVIGK 22  
 Db 5 IDIGFTRHGLTHGK 18

RESULT 42  
 Q7Z992  
 ID Q7Z992 PRELIMINARY; PRT; 22 AA.  
 AC Q7Z992;  
 DT 01-OCT-2003 (TReMBLrel. 25, Created)  
 DT 01-OCT-2003 (TReMBLrel. 25, Last sequence update)

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DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE SPAC11H1.01 protein (Fragment).
GN NAME=SPAC11H1.01;
OS Schizosaccharomyces pombe (Fission yeast).
OC Eukaryota; Fungi; Ascomycota; Schizosaccharomycetes;
OC Schizosaccharomycetales; Schizosaccharomycetaceae;
OC Schizosaccharomycetes.
OX NCBI_TaxID=4896;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=972H-;
RX MEDLINE=21848401; PubMed=11859360; DOI=10.1038/nature724;
RA Wood V., Williams R., Rajandream M.A., Lyne R., Stewart A.,
RA Brooks J., Peat N., Hayes J., Baker S., Basham D., Bowman S.,
RA Skroboos K., Brown D., Brown S., Chillingworth T., Churcher C.,
RA Collins M., Connor R., Cronin A., Davis P., Feltwell T., Fraser A.,
RA Gencies S., Goble A., Hamlin N., Harris D., Hidalgo J., Hodgson G.,
RA Holroyd S., Hornaby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
RA James K., Jones L., Jones M., Leather S., McDonald S., McLean J.,
RA Mooney P., Moule S., Mungall K., Murphy L., Niblett D., Odell C.,
RA Oliver K., O'Neill S., Pearson D., Quail M.A., Rabinowitsch E.,
RA Rutherford K., Rutter S., Saunders D., Seeger K., Sharp S.,
RA Skelton J., Simmonds M., Squares R., Squares S., Stevens K.,
RA Taylor K., Taylor R.G., Tivey A., Walsh S., Warren T., Whitehead S.,
RA Woodward J., Volkmer G., Aert R., Robben J., Grymonprez B.,
RA Welljens I., Vanstreels E., Rieger M., Schafer M., Muller-Auer S.,
RA Gabel C., Fuchs M., Dusterhoft A., Fritze C., Holzer E., Moestl D.,
RA Hilbert H., Borzym K., Langer I., Beck A., Lehrach H., Reinhardt R.,
RA Pohl T.M., Eger P., Zimmermann W., Wedler H., Wambutt R., Purnelle B.,
RA Goffeau A., Cadieu E., Dreano S., Gloux S., Lelaure V., Mottier S.,
RA Galibert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
RA Lucas M., Rochet M., Gaillardin C., Tallada V.A., Garzon A., Thode G.,
RA Daga R.R., Cruzado L., Jimenez J., Sanchez M., del Rey F., Benito J.,
RA Dominguez A., Revuelta J.L., Moreno S., Armstrong J., Foreburg S.L.,
RA Cerutti L., Lowe T., McCombie W.R., Paulsen I., Potashkin J.,
RA Shpakovski G.V., Ussery D., Barrell B.G., Nurse P.;
RT "The genome sequence of Schizosaccharomyces pombe."
RL Nature 415:871-880(2002).
DR EMBL; AL158056; CAD99129.1; -.
DR GenDB Spombe; SPAC11H1.01; -.
FT NON_TER 22 22
SQ SEQUENCE 22 AA; 2622 MW; E4F98589F9E35D9D9 CRC64;

Query Match 21.1%; Score 26; DB 2; Length 22;
Best Local Similarity 46.7%; Pred. No. 7e+03;
Matches 7; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 9 IORGPGRAFTVTKI 23
DB 6 INEHPRIILNTIEKI 20

RESULT 43
Q9SY23 PRELIMINARY; PRT; 22 AA.
AC Q9SY23;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE T1H7.9.
OS Arabidopsis thaliana (Mouse-ear cress).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;
OC eurosid II; Brassicales; Brassicaceae; Arabidopsis.
OX NCBI_TaxID=3702;
RN [1]
RP SEQUENCE FROM N.A.
RA Buehler E., Shinn P., Dewar K., Feng J., Kim C., Li Y., Sun H.,
RA Conway A., Conway A., Kurtz D., Oji O., Shen Y.K., Toriumi M.,
RA Vysotskaia V., Yu G., Davis R.W., Federspiel N.A., Theologis A.,
RA Ecker J.R.;
RL Submitted (MAY-1998) to the EMBL/GenBank/DBJ databases.
[2]

SEQUENCE FROM N.A.
RA Shinn P., Brooks S., Buehler E., Chao Q., Dunn P., Khan S., Kim C.,
RA Walker M., Altafi H., Araujo R., Conn L., Conway A., Gonzalez A.,
RA Hansen N., Huizar L., Kremenetskaia I., Lenz C., Li J., Liu S.,
RA Luros S., Rowley D., Schwartz J., Toriumi M., Vysotskaia V., Yu, G.,
RA Davis R., Federspiel N., Theologis A., Ecker J.;
RL Submitted (MAY-1999) to the EMBL/GenBank/DBJ databases.
[3]
RP SEQUENCE FROM N.A.
RA Cheuk R., Shinn P., Brooks S., Buehler E., Chao Q., Johnson-Hopson C.,
RA Khan S., Kim C., Altafi H., Bei B., Chin C., Chiou J., Choi E.,
RA Conn L., Conway A., Gonzalez A., Hansen N., Howing B., Koo T., Lam B.,
RA Lee J., Lenz C., Li J., Liu A., Liu J., Liu S., Mukharsky N.,
RA Nguyen M., Palm C., Pham P., Sakano H., Schwartz J., Southwick A.,
RA Thaveri A., Toriumi M., Vaysberg M., Yu G., Davis R., Federspiel N.,
RA Theologis A., Ecker J.;
RL Submitted (JUN-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AC004135; AA032934.1; -.
DR PIR; H86433; H86433.
SQ SEQUENCE 22 AA; 2642 MW; 747DFB4CF6342ED6 CRC64;

Query Match 21.1%; Score 26; DB 2; Length 22;
Best Local Similarity 62.5%; Pred. No. 7e+03;
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 NNTKRSE 8
DB 8 NKXKSE 15

RESULT 44
Q6U2M9 PRELIMINARY; PRT; 23 AA.
AC Q6U2M9;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE Galactinol synthase (EC 2.4.1.123) (fragment).
GN Name=GAS1;
OS Momordica charantia (Bitter melon) (Balsam pear).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;
OC eurosid I; Cucurbitales; Cucurbitaceae; Momordica.
OX NCBI_TaxID=3673;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22975109; PubMed=14526110; DOI=10.1104/pp.103.027714;
RA Ayre B.G., Blair J.E., Turgeon R.;
RT "Functional and phylogenetic analyses of a conserved regulatory
RT program in the phloem of minor veins."
RL Plant Physiol. 133:1229-1239(2003).
DR EMBL; AY379780; AAQ74882.1; -.
DR GO; GO:0047216; F:inositol 3-alpha-galactosyltransferase acti. .; IEA.
DR GO; GO:0016757; F:transferase activity, transferring glycosyl. .; IEA.
KW Glycosyltransferase, Transferase.
FT NON_TER 23 23
SQ SEQUENCE 23 AA; 2444 MW; 62411699CAB81657 CRC64;

Query Match 21.1%; Score 26; DB 2; Length 23;
Best Local Similarity 71.4%; Pred. No. 7.3e+03;
Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 13 PGRAFTV 19
DB 16 PKRAYVT 22

RESULT 45
Q6U2N2 PRELIMINARY; PRT; 24 AA.
AC Q6U2N2;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)

```

DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)  
DE Galactinol synthase (EC 2.4.1.123) (Fragment).  
GN Name=GAS1;  
OS Citrullus lanatus (Watermelon) (Citrullus vulgaris).  
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;  
OC euroside I; Cucurbitales; Cucurbitaceae; Citrullus.  
OX NCBI\_TaxID=3654;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=22975109; PubMed=14526110; DOI=10.1104/pp.103.027714;  
RA Ayre B.G., Blair J.E., Turgeon R.;  
RT "Functional and phylogenetic analyses of a conserved regulatory  
RL program in the phloem of minor veins.";  
DR EMBL; AY379777; AAQ74879.1; -.  
DR GO; GO:0047216; P:inositol 3-alpha-galactosyltransferase acti. . .; IEA.  
DR GO; GO:0016757; P:transferase activity, transferring glycosyl. . .; IEA.  
KW Glycosyltransferase; Transferase.  
FT NON\_TER 24 24  
SQ SEQUENCE 24 AA; 2538 MW; E2BC0AE9D7930C06 CRC64;  
Query Match 21.1%; Score 26; DB 2; Length 24;  
Best Local Similarity 71.4%; Pred No. 7.7e+03;  
Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
QY 13 PGRAFTV 19  
Db 17 PKRAVVT 23

Search completed: May 16, 2005, 13:00:27  
Job time : 138.231 secs

**This Page Blank (uspto)**

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 16, 2005, 12:53:32 ; Search time 28.9231 Seconds  
(without alignments)  
79.839 Million cell updates/sec

Title: US-08-869-386-3

Perfect score: 123

Sequence: 1 NNTKSERIQGPGRAFTVIGIKIG 24

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 4989

Minimum DB seq length: 0

Maximum DB seq length: 25

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : PIR 79.\*

1: pir1.\*

2: pir2.\*

3: pir3.\*

4: pir4.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

| Result No. | Score | Query Match | Length | DB ID    | Description         |
|------------|-------|-------------|--------|----------|---------------------|
| 1          | 64    | 52.0        | 20     | 2 S65399 | immunodeficiency v  |
| 2          | 33    | 26.8        | 25     | 2 S21197 | hydrogensulfite re  |
| 3          | 28    | 22.8        | 24     | 2 B60422 | MSEL-neurophysin -  |
| 4          | 27    | 22.0        | 20     | 2 S48654 | Plasmapsin II - ma  |
| 5          | 27    | 22.0        | 20     | 2 S03505 | T-cell receptor al  |
| 6          | 26.5  | 21.5        | 14     | 2 PA0109 | porin por 1B - Ara  |
| 7          | 26.5  | 21.5        | 14     | 2 PA0045 | porin por1 - Arabi  |
| 8          | 26    | 21.1        | 20     | 2 S63490 | dissimilatory sulf  |
| 9          | 26    | 21.1        | 22     | 2 H86433 | protein T17H7.9 [i  |
| 10         | 25    | 20.3        | 10     | 2 D28027 | protein P7 curle    |
| 11         | 25    | 20.3        | 12     | 2 S11286 | exo-alpha-sialidas  |
| 12         | 25    | 20.3        | 16     | 2 JN0264 | translation initia  |
| 13         | 25    | 20.3        | 25     | 2 A60807 | heat shock protein  |
| 14         | 25    | 20.3        | 25     | 2 S51071 | ribosomal protein   |
| 15         | 24.5  | 19.9        | 17     | 2 A37823 | dihydroliipoamide S |
| 16         | 24    | 19.5        | 7      | 2 P70515 | T-cell receptor be  |
| 17         | 24    | 19.5        | 11     | 2 G61497 | seed protein ws-23  |
| 18         | 24    | 19.5        | 13     | 2 C53275 | Ig kappa-1 chain J  |
| 19         | 24    | 19.5        | 14     | 2 PH0915 | T-cell receptor be  |
| 20         | 24    | 19.5        | 20     | 2 S28405 | lamin B receptor -  |
| 21         | 24    | 19.5        | 21     | 2 S31427 | biliary glycoprote  |
| 22         | 24    | 19.5        | 22     | 2 B48395 | probable angiotens  |
| 23         | 24    | 19.5        | 22     | 2 F41476 | probable antigen 6  |
| 24         | 24    | 19.5        | 22     | 2 C42856 | hypothetical prote  |
| 25         | 24    | 19.5        | 25     | 2 D41575 | bovinin-like pept   |
| 26         | 23.5  | 19.1        | 13     | 2 PS0453 | 36K protein 3124 -  |
| 27         | 23.5  | 19.1        | 22     | 2 A28524 | diaminopropionate   |
| 28         | 23.5  | 19.1        | 24     | 2 T01780 | probable gag polym  |
| 29         | 23    | 18.7        | 10     | 2 S65388 | cytochrome-c oxida  |

30 23 18.7 15 2 PNO629 integration host f  
31 23 18.7 16 2 H29501 fibrinopeptide A -  
32 23 18.7 17 2 I51203 myosin heavy chain  
33 23 18.7 17 2 AF2093 heterocyst-inhibit  
34 23 18.7 18 2 S39153 translation elonga  
35 23 18.7 19 2 I49037 Tcr delta chain V-  
36 23 18.7 20 1 LPSSTT tet leader peptide  
37 23 18.7 20 2 S77991 cytochrome-c oxida  
38 23 18.7 23 2 S47565 ribosomal protein  
39 23 18.7 24 2 S47563 nucleoside-diphosp  
40 22 17.9 12 2 S65629 protoporphyrinogen  
41 22 17.9 16 2 PH1771 T cell receptor al  
42 22 17.9 16 2 H41299 T-cell receptor al  
43 22 17.9 19 2 S66213 glucose 1-dehydrog  
44 22 17.9 19 2 A33361 CAMP-regulated pho  
45 22 17.9 19 2 B48138 d(TTAGGG)n-binding

#### ALIGNMENTS

##### RESULT 1

S65399  
immunodeficiency virus type 1, HIV-1 gp120 - human (fragments)

C:Species: Homo sapiens (man)

C>Date: 28-Oct-1996 #sequence\_revision 13-Mar-1997 #text\_change 17-Mar-1999

C:Accession: S65399

R:Niwa, Y.; Yano, M.; Futaki, S.; Okumura, Y.; Kido, H.

A:Title: T-cell membrane-associated serine protease, tryptase TL(2), binds human immunode  
man immunodeficiency virus type 1 inhibit cleavage of gp120.

A:Reference number: S65399; MUID:96203909; PMID:8620895

A:Accession: S65399

A>Status: preliminary

A:Molecule type: protein

A:Residues: 1-10;11-20 <NIW>

C:Superfamily: type B retrovirus env polyprotein

Query Match 52.0%; Score 64; DB 2; Length 20;

Best Local Similarity 92.3%; Pred. No. 0.0017;

Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 11 RGPGRAPFTVIGIKI 23

|||||||

DB 1 RGPGRAPFTVIGRI 13

##### RESULT 2

S21197

hydrogensulfite reductase (SC 1.8.99.3) alpha chain - Desulfovibrio vulgaris (fragment)  
N:Alternate names: bisulfite reductase; desulfofusicidin; desulfofubidin; desulfoviridin;  
C:Species: Desulfovibrio vulgaris

C>Date: 19-Mar-1997 #sequence\_revision 11-Jun-1999 #text\_change 09-Jul-2004

C:Accession: S21197

R:Pieper, A.J.; Duyvis, M.G.; van Helvoort, J.M.L.M.; Wolbert, R.B.G.; Hagen, W.R.

Eur. J. Biochem. 205, 111-115, 1992

A:Title: The third subunit of desulfovibridin-type dissimilatory sulfite reductases.

A:Reference number: S21197; MUID:92209491; PMID:1555572

A:Accession: S21197

A:Molecule type: protein

A:Residues: 1-25 <PIB>

A:Cross-references: UNIPROT:P45574

A:Experimental source: strain Hildenborough

C:Genetics:

A:Gene: dsuC

C:Complex: heterohexamer; two alpha, two beta and two gamma chains

C:Function:

A:Description: catalyzes the six-electron reduction of sulfite to sulfide

A:Pathway: the terminal oxidase in the sulfate-reduction pathway

C:Keywords: heterohexamer; oxidoreductase

Query Match 26.8%; Score 33; DB 2; Length 25;

Best Local Similarity 37.5%; Pred. No. 1.7e+02;

```
Matches 6; Conservative 5; Mismatches 5; Indels 0; Gaps 0;
QY 3 TRKSERIQRGPGRAFV 18
Db 5 TPQLDQLESQGWXSFV 20
RESULT 3
B60422
MSL-neurophysin - African clawed frog (fragment)
N:Alternate names: vasopressin-associated neurophysin
C:Species: Xenopus laevis (African clawed frog)
C>Date: 12-Feb-1993 #sequence_revision 12-Feb-1993 #text_change 17-Mar-1999
C:Accession: B60422
R:Chauvet, J.; Michel, G.; Rouille, Y.; Chauvet, M.T.; Acher, R.
Neuropeptides 15, 123-127, 1990
A:Title: Identification of two types of neurophysins in Xenopus laevis neurointermediate
A:Reference number: A60422; MUID:91067001; PMID:2250763
A:Accession: B60422
A:Molecule type: protein
A:Residues: 1-24 <CHA>
C:Superfamily: oxytocin-neurophysin
C:Keywords: pituitary
Query Match 22.8%; Score 28; DB 2; Length 24;
Best Local Similarity 38.5%; Pred. No. 1e+03;
Matches 5; Conservative 3; Mismatches 5; Indels 0; Gaps 0;
QY 2 NTRKSERIQRGPG 14
Db 4 DTELQXMXQXGPG 16
RESULT 4
S48654
Plasmeprin II - malaria parasite (Plasmodium falciparum)
C:Species: Plasmodium falciparum
C>Date: 15-Jul-1995 #sequence_revision 19-Apr-1996 #text_change 09-Jun-2000
C:Accession: S48654
R:Hill, J.; Tyae, L.; Phylip, L.H.; Kay, J.; Dunn, B.M.; Berry, C.
FEBS Lett. 352, 155-158, 1994
A:Title: High level expression and characterization of Plasmeprin II, an aspartic protei
A:Reference number: S48654; MUID:95010698; PMID:7925966
A:Accession: S48654
A>Status: preliminary
A:Molecule type: DNA
A:Residues: 1-20 <HIL>
Query Match 22.0%; Score 27; DB 2; Length 20;
Best Local Similarity 50.0%; Pred. No. 1.2e+03;
Matches 6; Conservative 1; Mismatches 5; Indels 0; Gaps 0;
QY 10 QRGPGRAFTVIG 21
Db 9 QMGRGSEHLTIG 20
RESULT 5
S03505
T-cell receptor alpha chain J region (80) - mouse (fragment)
C:Species: Mus musculus (house mouse)
C>Date: 28-Feb-1990 #sequence_revision 28-Feb-1990 #text_change 30-May-1997
C:Accession: S03505
R:Winkler, A.; Mjolsness, S.; Hood, L.
Nature 316, 832-836, 1995
A:Title: Genomic organization of the genes encoding mouse T-cell receptor alpha-chain.
A:Reference number: S03503; MUID:85296332; PMID:2993908
A:Accession: S03505
A:Molecule type: DNA
A:Residues: 1-20 <WIN>
A:Cross-references: EMBL:X02859
A>Note: this sequence was determined from the germline gene
C:Keywords: T-cell receptor
```

```
Query Match 22.0%; Score 27; DB 2; Length 20;
Best Local Similarity 29.4%; Pred. No. 1.2e+03;
Matches 5; Conservative 4; Mismatches 8; Indels 0; Gaps 0;
QY 2 NTRKSERIQRGPGRAFV 18
Db 1 NTEGADRLTFKGTQLI 17
RESULT 6
PA0109
porin por 1B - Arabidopsis thaliana (fragment)
C:Species: Arabidopsis thaliana (mouse-ear cress)
C>Date: 07-Apr-1995 #sequence_revision 26-May-1995 #text_change 09-Jul-2004
C:Accession: PA0109
R:Kamo, M.; Kawakami, T.; Taugita, A.
submitted to JIPID, March 1995
A:Reference number: PA0109
A:Accession: PA0109
A:Molecule type: protein
A:Residues: 1-14 <KAM>
A:Cross-references: UNIPROT:Q8LA84; UNIPROT:Q42292
A:Experimental source: root
```

```
Query Match 21.5%; Score 26.5; DB 2; Length 14;
Best Local Similarity 50.0%; Pred. No. 1.1e+03;
Matches 6; Conservative 2; Mismatches 3; Indels 1; Gaps 1;
QY 11 RGPGRFVTIGK 22
Db 2 KGPG-LYTEIGK 12
```

```
RESULT 7
PA0045
porin por1 - Arabidopsis thaliana (fragment)
C:Species: Arabidopsis thaliana (mouse-ear cress)
C>Date: 30-Jun-1992 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C:Accession: PA0045
R:Kamo, M.; Kawakami, T.; Miyatake, N.; Taugita, A.
submitted to JIPID, July 1994
A:Description: Separation and characterization of Arabidopsis proteins by two-dimensional
A:Reference number: PA0001
A:Accession: PA0045
A:Molecule type: protein
A:Residues: 1-14 <KAM>
A:Cross-references: UNIPROT:Q7MW9
A:Experimental source: root
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Query Match 21.5%; Score 26.5; DB 2; Length 14;
Best Local Similarity 50.0%; Pred. No. 1.1e+03;
Matches 6; Conservative 2; Mismatches 3; Indels 1; Gaps 1;
QY 11 RGPGRFVTIGK 22
Db 2 KGPG-LYTEIGK 12
```

```
RESULT 8
S63490
dissimilatory sulfite reductase alpha chain, soluble - Desulfovibrio desulfuricans (fragm
C:Species: Desulfovibrio desulfuricans
C>Date: 28-Oct-1996 #sequence_revision 13-Mar-1997 #text_change 09-Jul-2004
C:Accession: S63490
R:Steuber, J.; Arendsen, A.F.; Hagen, W.R.; Kroneck, P.M.H.
Eur. J. Biochem. 233, 873-879, 1995
A:Title: Molecular properties of the dissimilatory sulfite reductase from Desulfovibrio (
A:Reference number: S63489; MUID:96085152; PMID:8521853
A:Accession: S63490
A>Status: preliminary
A:Molecule type: protein
A:Residues: 1-20 <STE>
```

A;Cross-references: UNIPROT:Q9RAH4

Query Match 21.1%; Score 26; DB 2; Length 20;  
Best Local Similarity 33.3%; Pred. No. 1.8e+03;  
Matches 4; Conservative 5; Mismatches 3; Indels 0; Gaps 0;  
QY 7 ERIQPGRAFV 18  
: : : : :  
DB 9 DQLESGPWPSFV 20

RESULT 9  
H86433  
protein T1H7.9 [imported] - Arabidopsis thaliana  
C;Species: Arabidopsis thaliana (mouse-ear cress)  
C;Date: 02-Mar-2001 #sequence\_revision 02-Mar-2001 #text\_change 09-Jul-2004  
C;Accession: H86433  
R;Theologis, A.; Ecker, J.R.; Palm, C.J.; Pederspiel, N.A.; Kaul, S.; White, O.; Alonso,  
Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar, K.;  
Nature 408, 816-820, 2000  
A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, E.; Kim, C.  
C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Lueros, J.S.; Maiti, R.; Marziali,  
Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.  
A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallon,  
ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.  
A;Title: Sequence and analysis of chromosome 1 of the plant Arabidopsis.  
A;Reference number: A86141; MUID:21016719; PMID:11130712  
A;Accession: H86433  
A;Status: preliminary  
A;Molecule type: DNA  
A;Residues: 1-22 <STO>  
C;Cross-references: UNIPROT:Q9SY23; GB:AE005172; NID:g4926824; PIDN:AAD32934.1; GSPDB:GN  
C;Genetics:  
A;Gene: T1H7.9  
A;Map position: 1

Query Match 21.1%; Score 26; DB 2; Length 22;  
Best Local Similarity 62.5%; Pred. No. 2e+03;  
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;  
QY 1 NNTRKSR 8  
: : : : :  
DB 8 NKKKKSR 15

RESULT 10  
D28027  
protein P7 - curled-leaved tobacco (fragment)  
C;Species: Nicotiana glauca (curled-leaved tobacco)  
C;Date: 19-May-1989 #sequence\_revision 19-May-1989 #text\_change 09-Jul-2004  
C;Accession: D28027  
R;Bauw, G.; De Loose, M.; Inze, D.; Van Montagu, M.; Vandekerckhove, J.  
Proc. Natl. Acad. Sci. U.S.A. 84, 4806-4810, 1987  
A;Title: Alterations in the phenotype of plant cells studied by NH2-terminal amino acid-  
A;Reference number: A94167  
A;Accession: D28027  
A;Molecule type: protein  
A;Residues: 1-10 <BAU>  
A;Cross-references: UNIPROT:Q7M1V8

Query Match 20.3%; Score 25; DB 2; Length 10;  
Best Local Similarity 71.4%; Pred. No. 1.3e+03;  
Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
QY 14 GRAFTI 20  
: : : : :  
DB 3 GRSFVPI 9

RESULT 11  
S11286  
exo-alpha-sialidase (EC 3.2.1.18) - influenza A virus (strain A/FPV/Rostock/34 [H7N1])

N;Alternate names: neuraminidase  
C;Species: influenza A virus  
C;Date: 31-Dec-1990 #sequence\_revision 31-Dec-1990 #text\_change 22-Jun-1999  
C;Accession: S11286  
R;Robertson, J.S.  
Nucleic Acids Res. 6, 3745-3757, 1979  
A;Title: 5' and 3' terminal nucleotide sequences of the RNA genome segments of influenza  
A;Reference number: S11286; MUID:80034428; PMID:493121  
A;Accession: S11286  
A;Molecule type: genomic RNA  
A;Residues: 1-12 <ROB>  
A;Cross-references: EMBL:J02114; NID:g324483; PIDN:AAA43398.1; PID:g324486  
C;Genetics:  
A;Map position: segment 6  
A;Superfamily: influenza virus exo-alpha-sialidase  
C;Keywords: glycosidase; hydrolase

Query Match 20.3%; Score 25; DB 2; Length 12;  
Best Local Similarity 44.4%; Pred. No. 1.6e+03;  
Matches 4; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

QY 13 PGRAFVTIG 21  
: : : : :  
DB 3 PNQKIITIG 11

RESULT 12  
JN0264  
translation initiation factor eIF-2 gamma chain - pig (fragment)  
N;Alternate names: eIF2 gamma chain  
C;Species: Sus scrofa domestica (domestic pig)  
C;Date: 09-Oct-1992 #sequence\_revision 09-Oct-1992 #text\_change 09-Jul-2004  
C;Accession: JN0264  
R;Mukoyama, E.B.; Shiohara, H.; Suzuki, H.  
Biosci. Biotechnol. Biochem. 56, 680-681, 1992  
A;Title: GTP-binding sequences in the gamma subunit of pig liver initiation factor 2.  
A;Reference number: JN0264; MUID:92282179; PMID:1368212  
A;Accession: JN0264  
A;Molecule type: protein  
A;Residues: 1-16 <MUK>  
A;Cross-references: UNIPROT:Q9TRQ9  
A;Experimental source: liver  
A;Keywords: GTP binding  
P;1-16/Region: GTP binding #status experimental

Query Match 20.3%; Score 25; DB 2; Length 16;  
Best Local Similarity 50.0%; Pred. No. 2.1e+03;  
Matches 5; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

QY 15 RAFVTIGKIG 24  
: : : : :  
DB 1 QATINIGTIG 10

RESULT 13  
A60807  
heat shock protein 90 - rat (fragment)  
C;Species: Rattus norvegicus (Norway rat)  
C;Date: 30-Sep-1993 #sequence\_revision 30-Sep-1993 #text\_change 17-Mar-1999  
C;Accession: A60807  
R;Denis, M.

Anal. Biochem. 173, 405-411, 1988  
A;Title: Two-step purification and N-terminal amino acid sequence analysis of the rat M-  
A;Reference number: A60807; MUID:89048319; PMID:3189818  
A;Accession: A60807  
A;Molecule type: protein  
A;Residues: 1-25 <DEN>  
A;Comment: This protein associates with steroid hormone receptors and with the Rous sarco-  
C;Superfamily: heat shock protein 90  
C;Keywords: phosphoprotein

Query Match 20.3%; Score 25; DB 2; Length 25;  
Best Local Similarity 40.0%; Pred. No. 3.2e+03;

Matches 6; Conservative 2; Mismatches 5; Indels 2; Gaps 1;

QY 7 ERIQRG--PGRAFVT 19  
| : | | |  
DB 2 EEVQKGEFVETFAT 16

RESULT 14  
S51071  
ribosomal protein S20 - *Thermus aquaticus* (fragment)  
C:Species: *Thermus aquaticus*  
C:Date: 15-Jul-1995 #sequence\_revision 01-Nov-1996 #text\_change 01-Nov-1996  
C:Accession: S51071  
R:Tsioboli, P.; Herfurth, E.; Choli, T.  
Eur. J. Biochem. 226, 169-177, 1994  
A:Title: Purification and characterization of the 30S ribosomal proteins from the bacterium *Thermus aquaticus*  
A:Reference number: S51053; MUID:95045586; PMID:7957245  
A:Accession: S51071  
A:Molecule type: protein  
A:Residues: 1-25 <TSI>  
A:Note: the source is designated as *Thermus thermophilus*  
C:Keywords: protein biosynthesis; ribosome

Query Match 20.3%; Score 25; DB 2; Length 25;  
Best Local Similarity 35.7%; Pred. No. 3.2e+03;  
Matches 5; Conservative 2; Mismatches 7; Indels 0; Gaps 0;

QY 2 NTRKSERIQRGPR 15  
| : | | |  
DB 4 NAKPKKEAQRPRTR 17

RESULT 15  
A37823  
dihydrolipoamide S-acetyltransferase (EC 2.3.1.12) - bovine (fragment)  
C:Species: *Bos primigenius taurus* (cattle)  
C:Date: 30-Apr-1991 #sequence\_revision 30-Apr-1991 #text\_change 09-Jul-2004  
C:Accession: A37823  
R:Rahmatullah, M.; Radke, G.A.; Andrews, P.C.; Roche, T.E.  
J. Biol. Chem. 265, 14512-14517, 1990  
A:Title: Changes in the core of the mammalian-pyruvate dehydrogenase complex upon selection of the bovine enzyme  
A:Reference number: A37823; MUID:90354445; PMID:2167319  
A:Accession: A37823  
A:Status: preliminary  
A:Molecule type: protein  
A:Residues: 1-17 <RAH>  
A:Cross-references: UNIPROT:Q7M2M8  
C:Keywords: acyltransferase; coenzyme A

Query Match 19.9%; Score 24.5; DB 2; Length 17;  
Best Local Similarity 66.7%; Pred. No. 2.6e+03;  
Matches 6; Conservative 1; Mismatches 1; Indels 1; Gaps 1;

QY 12 GP-GRFVT 19  
| | | | |  
DB 1 GPKGRVFEVS 9

RESULT 16  
PT0515  
T-cell receptor beta chain V-D-J region (100-4AE) - mouse (fragment)  
C:Species: *Mus musculus* (house mouse)  
C:Date: 17-Jul-1992 #sequence\_revision 17-Jul-1992 #text\_change 30-May-1997  
C:Accession: PT0515  
R:Feeney, A.J.  
J. Exp. Med. 174, 115-124, 1991  
A:Title: Junctional sequences of fetal T cell receptor beta chains have few N regions.  
A:Reference number: PT0509; MUID:91277601; PMID:1711558  
A:Accession: PT0515  
A:Status: translation not shown  
A:Molecule type: mRNA  
A:Residues: 1-7 <FE>  
A:Experimental source: adult thymus, strain BALB/c

C:Keywords: T-cell receptor

Query Match 19.5%; Score 24; DB 2; Length 7;  
Best Local Similarity 80.0%; Pred. No. 2.8e+05;  
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 12 GPGRA 16  
| | | | |  
DB 3 GPGQA 7

RESULT 17  
G61497  
seed protein ws-23 - winged bean (fragment)  
C:Species: *Psophocarpus tetragonolobus* (winged bean)  
C:Date: 07-Oct-1994 #sequence\_revision 07-Oct-1994 #text\_change 07-Oct-1994  
C:Accession: G61497  
R:Hirano, H.  
J. Protein Chem. 8, 115-130, 1989  
A:Title: Microsequence analysis of winged bean seed proteins electrophoretically separated from two-dimensional polyacrylamide gels  
A:Reference number: A61491; MUID:89351606; PMID:2765119  
A:Accession: G61497  
A:Status: preliminary  
A:Molecule type: protein  
A:Residues: 1-11 <HIR>  
C:Keywords: glycoprotein; seed

Query Match 19.5%; Score 24; DB 2; Length 11;  
Best Local Similarity 50.0%; Pred. No. 2.1e+03;  
Matches 5; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

QY 5 KSERIQRGPG 14  
| | | | |  
DB 2 KSKXIELEPG 11

RESULT 18  
CS3275  
Ig kappa-1 chain J3 segment b95 allotype - rabbit (fragment)  
C:Species: *Oryctolagus cuniculus* (domestic rabbit)  
C:Date: 02-May-1994 #sequence\_revision 18-Nov-1994 #text\_change 16-Aug-1996  
C:Accession: CS3275  
R:Ayadi, H.; Marche, P.N.; Cazenave, P.A.  
Immunogenetics 34, 201-207, 1991  
A:Title: Evolution of the rabbit immunoglobulin kappa chain genes.  
A:Reference number: A53275; MUID:91372868; PMID:1909995  
A:Accession: CS3275  
A:Status: preliminary  
A:Molecule type: DNA  
A:Residues: 1-13 <AYA>  
A:Note: sequence extracted from NCBI backbone (NCBI:56069, NCBI:56164)  
C:Comment: This J3 segment may not be functional because of substitutions in the 7 mer at position 13  
C:Keywords: heterotrimer; immunoglobulin

Query Match 19.5%; Score 24; DB 2; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.5e+03;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 11 RGP 14  
| | | | |  
DB 3 RGP 6

RESULT 19  
PH0915  
T-cell receptor beta chain V-D-J region (isolate 1) - rat (fragment)  
C:Species: *Rattus norvegicus* (Norway rat)  
C:Date: 09-Oct-1992 #sequence\_revision 09-Oct-1992 #text\_change 30-May-1997  
C:Accession: PH0915  
R:Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenberg, A.A.; Wilson, D.B.  
J. Exp. Med. 174, 1467-1476, 1991  
A:Title: Analysis of T cell receptor beta chains in Lewis rats with experimental allergic encephalomyelitis  
A:Reference number: PH0891; MUID:92078857; PMID:1836012



A:Accession: PH0915

A:Molecule type: mRNA

A:Residues: 1-14 <COL>

A:Experimental source: concanavalin A-activated lymphoblast

A>Note: the authors translated the codon GGG for residue 8 as Glu and GAG for residue 9

C:Keywords: T-cell receptor

Query Match 19.5%; Score 24; DB 2; Length 14;

Best Local Similarity 50.0%; Pred. No. 2.6e+03;

Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 10 ORGPGRAF 17

Db 4 RRGTEAY 11

RESULT 20

S28405

lamin B receptor - turkey (fragment)

A:Alternate names: inner nuclear membrane protein p58

C:Species: Meleagris gallopavo (common turkey)

C>Date: 13-Jan-1995 #sequence\_revision 13-Jan-1995 #text\_change 09-Jul-2004

C:Accession: S28405

R:Simos, G.; Georgatos, S.D.

EMBO J. 11, 4027-4036, 1992

A>Title: The inner nuclear membrane protein p58 associates in vivo with a p58 kinase and

A:Reference number: S28405; MUID:93010998; PMID:1327755

A:Accession: S28405

A:Molecule type: protein

A:Residues: 1-20 <Sim>

A:Cross-references: UNIPROT:Q7LZ11

C:Keywords: DNA binding; nucleus; receptor; transmembrane protein

Query Match

Best Local Similarity 19.5%; Score 24; DB 2; Length 20;

Matches 5; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

Qy 4 RKSERIQRGPR 15

Db 3 RKQSQSSSPSR 14

RESULT 21

S31427

biliary glycoprotein - human

C:Species: Homo sapiens (man)

C>Date: 13-Jan-1995 #sequence\_revision 13-Jan-1995 #text\_change 07-Feb-1997

C:Accession: S31427

R:Nedellec, P.; Turbide, C.; Barnett, T.R.; Beauchemin, N.

submitted to the EMBL Data Library, July 1992

A:Description: Characterization of the human biliary glycoprotein regulatory region.

A:Reference number: S31427

A:Accession: S31427

A>Status: preliminary

A:Molecule type: DNA

A:Residues: 1-21 <NED>

A:Cross-references: EMBL:X67277

C:Keywords: glycoprotein

Query Match

Best Local Similarity 19.5%; Score 24; DB 2; Length 21;

Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 13 PGRAF 17

Db 14 PGRGF 18

RESULT 22

B48395

probable angiotensin-converting enzyme - bovine (fragments)

C:Species: Bos primigenius taurus (cattle)

C>Date: 21-Jan-1994 #sequence\_revision 23-Mar-1995 #text\_change 09-Jul-2004

C:Accession: B48395

R:Maruyama, E.; Iwamatsu, A.; Takashima, S.

Biochem. Mol. Biol. Int. 29, 579-586, 1993

A>Title: Purification and amino acid microsequencing of alkaline phosphodiesterase I from

A:Reference number: A48395; MUID:93250579; PMID:8387370

A:Accession: B48395

A>Status: preliminary

A:Molecule type: protein

A:Residues: 1-22 <MAR>

A:Cross-references: UNIPROT:Q9TRH0

A:Experimental source: kidney

A>Note: sequence extracted from NCBI backbone

C:Superfamily: mammalian peptidyl-diesterase A

Query Match

Best Local Similarity 19.5%; Score 24; DB 2; Length 22;

Matches 5; Conservative 1; Mismatches 0; Gaps 0;

Qy 4 RKSERIQRGPR 13

Db 5 RKKEAGHQGP 14

RESULT 23

F41476

probable antigen 6 - Mycobacterium leprae (fragment)

C:Species: Mycobacterium leprae

C>Date: 10-Apr-1992 #sequence\_revision 10-Apr-1992 #text\_change 18-Jun-1993

C:Accession: F41476

R:Hartskeerl, R.A.; van Rens, R.M.; Stabel, L.F.E.M.; de Wit, M.Y.L.; Klatser, P.R.

Infect. Immun. 58, 2821-2827, 1990

A>Title: Selection and characterization of recombinant clones that produce Mycobacterium

A:Reference number: A41476; MUID:90354041; PMID:1696931

A:Accession: F41476

A>Status: preliminary; not compared with conceptual translation

A:Molecule type: DNA

A:Residues: 1-22 <HAR>

Query Match

Best Local Similarity 19.5%; Score 24; DB 2; Length 22;

Matches 6; Conservative 2; Mismatches 8; Indels 0; Gaps 0;

Qy 3 TRKSERIQRGPRAPV 18

Db 4 TRNSDGLDGRGTV 19

RESULT 24

C42856

hypothetical protein 3 EPF-region [imported] - human (fragment)

C:Species: Homo sapiens (man)

C>Date: 10-Jun-1993 #sequence\_revision 18-Nov-1994 #text\_change 20-Jun-2000

C:Accession: C42856

R:Liu, Z.; Diaz, L.A.; Haas, A.L.; Giudice, G.J.

J. Biol. Chem. 267, 15829-15835, 1992

A>Title: cDNA cloning of a novel human ubiquitin carrier protein. An antigenic domain spe

this human epidermal transcript.

A:Reference number: A42856; MUID:92348449; PMID:1379239

A:Accession: C42856

A>Status: preliminary

A:Molecule type: mRNA

A:Residues: 1-22 <LIU>

A:Experimental source: keratinocyte

A>Note: sequence extracted from NCBI backbone (NCBIN:109895, NCBI:109899)

Query Match

Best Local Similarity 19.5%; Score 24; DB 2; Length 22;

Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 11 RRGPG 14

Db 10 RRGPG 13

## RESULT 25

D41575  
bombinin-like peptide 4 - Bombina orientalis  
C:Species: Bombina orientalis  
C:Date: 30-Jun-1992 #sequence\_revision 30-Jun-1992 #text\_change 09-Jul-2004  
C:Accession: D41575  
R:Gibson, B.W.; Tang, D.; Mandrell, R.; Kelly, M.; Spindel, E.R.  
J. Biol. Chem. 266, 23103-23111, 1991  
A:Title: Bombinin-like peptides with antimicrobial activity from skin secretions of the  
A:Reference number: A41575; MUID:92078177; PMID:1744108  
A:Accession: D41575  
A:Status: preliminary  
A:Molecule type: protein  
A:Residues: 1-25 <GI>  
A:Cross-references: UNIPROT:P29005  
C:Superfamily: bombinin H precursor

Query Match 19.5%; Score 24; DB 2; Length 25;  
Best Local Similarity 45.5%; Pred. No. 4.5e+03;  
Matches 5; Conservative 2; Mismatches 4; Indels 0; Gaps 0;

QY 12 GPGRAFTVIGK 22

DB 1 GIGAAILSAGK 11

## RESULT 26

PS0453  
36K protein 3124 - rice (strain Nihonbare) (fragment)  
C:Species: Oryza sativa (rice)  
C:Date: 03-Feb-1994 #sequence\_revision 03-Feb-1994 #text\_change 23-Mar-1995  
C:Accession: PS0453  
R:Tsugita, A.  
submitted to JIPID, April 1993  
A:Reference number: PS0206  
A:Accession: PS0453  
A:Molecule type: protein  
A:Residues: 1-13 <TSU>  
A:Experimental source: leaf, chlorophyll, stem  
A:Note: molecular weight 36K, pI 6.1

Query Match 19.1%; Score 23.5; DB 2; Length 13;  
Best Local Similarity 50.0%; Pred. No. 2.9e+03;  
Matches 6; Conservative 1; Mismatches 4; Indels 1; Gaps 1;

QY 9 IQRGPGRAFTVI 20

DB 3 IQXAPG-XFVAV 13

## RESULT 27

A28524  
diaminopropionate ammonia-lyase - Salmonella typhimurium (fragment)  
N:Alternate names: diaminopropionatase  
C:Species: Salmonella typhimurium  
C:Date: 28-Aug-1989 #sequence\_revision 28-Aug-1989 #text\_change 18-Jun-1993  
C:Accession: A28524  
R:Nagabawa, T.; Tanizawa, K.; Satoda, T.; Yamada, H.  
J. Biol. Chem. 263, 958-964, 1988  
A:Title: Diaminopropionate ammonia-lyase from Salmonella typhimurium. Purification and  
tide.  
A:Reference number: A28524; MUID:88087224; PMID:3275662  
A:Accession: A28524  
A:Molecule type: protein  
A:Residues: 1-22 <NAG>

Query Match 19.1%; Score 23.5; DB 2; Length 22;  
Best Local Similarity 46.7%; Pred. No. 4.8e+03;  
Matches 7; Conservative 2; Mismatches 3; Indels 3; Gaps 1;

QY 2 NTRKSERIQPGRA 16

DB 10 NTR---RKKKGTGAA 21

## RESULT 28

T01780  
probable gag polymerase pseudogene - human (fragment)  
C:Species: Homo sapiens (man)  
C:Date: 13-Aug-1999 #sequence\_revision 13-Aug-1999 #text\_change 20-Oct-2000  
C:Accession: T01780  
R:Repaske, R.; O'Neill, R.R.; Steele, P.E.; Martin, M.A.  
Proc. Natl. Acad. Sci. U.S.A. 80, 678-682, 1983  
A:Title: Characterization and partial nucleotide sequence of endogenous type C retrovirus  
A:Reference number: Z14423; MUID:83143994; PMID:6298769  
A:Accession: T01780

A:Status: translated from GB/EMBL/DBJ; conceptual translation of pseudogene  
A:Molecule type: DNA  
A:Residues: 1-24 <REP>  
A:Cross-references: EMBL:J00274; NID:g182154  
C:Keywords: pseudogene

Query Match 19.1%; Score 23.5; DB 4; Length 24;  
Best Local Similarity 33.3%; Pred. No. 5.2e+03;  
Matches 6; Conservative 6; Mismatches 5; Indels 1; Gaps 1;

QY 5 KSERIQRGPGRAFTVIGK 22

DB 4 QSRPRPQG-GRALLNLAE 20

## RESULT 29

S65388  
cytochrome-c oxidase (EC 1.9.3.1) chain VII c, hepatic - rat (fragment)  
C:Species: Rattus norvegicus (Norway rat)  
C:Date: 28-Oct-1996 #sequence\_revision 13-Mar-1997 #text\_change 09-Jul-2004  
C:Accession: S65388; S65389  
R:Schaeffer, H.; Noack, H.; Hallanck, W.; Brandt, U.; von Jagow, G.  
Eur. J. Biochem. 230, 235-241, 1995  
A:Title: Cytochrome-c oxidase in developing rat heart. Enzymic properties and amino-termi  
A:Reference number: S65372; MUID:95324529; PMID:7601105  
A:Accession: S65388

A:Status: preliminary

A:Molecule type: protein

A:Residues: 1-10 <SCH>

A:Cross-references: UNIPROT:P80432

A:Accession: S65389

A:Status: preliminary

A:Molecule type: protein

A:Residues: 1-10 <SC2>

C:Superfamily: cytochrome-c oxidase chain VIIC

C:Keywords: oxidoreductase

Query Match 18.7%; Score 23; DB 2; Length 10;  
Best Local Similarity 50.0%; Pred. No. 2.8e+03;  
Matches 3; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 10 QRGPGR 15

DB 4 BEGPGK 9

## RESULT 30

PN0629  
integration host factor-like protein beta chain - Pseudomonas aeruginosa (fragment)  
C:Species: Pseudomonas aeruginosa  
C:Date: 05-Aug-1994 #sequence\_revision 05-Aug-1994 #text\_change 09-Jul-2004  
C:Accession: PN0629  
R:Toussaint, B.; Delic-Attree, I.; Vignais, P.M.  
Biochem. Biophys. Res. Commun. 196, 416-421, 1993

A:Title: Pseudomonas aeruginosa contains an IHF-like protein that binds to the algD prom

A:Reference number: PN0628; MUID:94030028; PMID:8216322

A:Accession: PN0629

A:Molecule type: protein

A:Residues: 1-15 <TOU>  
A:Cross-references: UNIPROT:Q9R533  
C:Comment: This protein forms a stable complex with the algD promoter in vitro, indicating

Query Match 18.7%; Score 23; DB 2; Length 15;  
Best Local Similarity 71.4%; Pred. No. 4e+03;  
Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 5 KSERIOR 11  
DB 3 KSELIER 9

RESULT 31  
H29501  
fibrinopeptide A - gray seal  
C:Species: Halichoerus grypus (gray seal)  
C:Date: 21-Nov-1987 #sequence\_revision 21-Nov-1987 #text\_change 09-Jul-2004  
C:Accession: H29501  
R:Blombaeck, B.; Blombaeck, M.; Hann, C.  
unpublished results, cited by Blombaeck, B., and Blombaeck, M., in Chemotaxonomy and Ser  
A:Reference number: A29501  
A:Accession: H29501  
A:Status: preliminary  
A:Molecule type: protein  
A:Residues: 1-16 <BLD>  
A:Cross-references: UNIPROT:Q7M316  
C:Superfamily: fibrinogen beta chain; fibrinogen beta/gamma homology; fibrinogen disulf

Query Match 18.7%; Score 23; DB 2; Length 16;  
Best Local Similarity 30.8%; Pred. No. 4.3e+03;  
Matches 4; Conservative 5; Mismatches 4; Indels 0; Gaps 0;

QY 2 NTRKSERIQRGPG 14  
DB 2 DTKESDFLAEGG 14

RESULT 32  
I51203  
myosin heavy chain - chicken (fragment)  
C:Species: Gallus gallus (chicken)  
C:Date: 04-Sep-1997 #sequence\_revision 07-Nov-1997 #text\_change 09-Jul-2004  
C:Accession: I51203  
R:Kelley, C.A.; Takahashi, M.; Yu, J.H.; Adelstein, R.S.  
J. Biol. Chem. 268, 12848-12854, 1993  
A:Title: An insert of seven amino acids confers functional differences between smooth mu  
A:Reference number: I51203; MUID:93286132; PMID:8509418  
A:Accession: I51203  
A:Status: preliminary; translated from GB/EMBL/DBJ  
A:Molecule type: mRNA  
A:Residues: 1-17 <KEL>  
A:Cross-references: UNIPROT:Q91352; GB:S62578; NID:G386220; PIDN:AAB27156.1; PID:G386221

Query Match 18.7%; Score 23; DB 2; Length 17;  
Best Local Similarity 28.6%; Pred. No. 4.5e+03;  
Matches 4; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 4 RKSERIORGPGRAF 17  
DB 1 KKDTSITQGPSY 14

RESULT 33  
AF2093  
heterocyst-inhibiting signaling peptide [imported] - Nostoc sp. (strain PCC 7120)  
C:Species: Nostoc sp. PCC 7120  
A:Note: Nostoc sp. PCC 7120 is a synonym of Anabaena sp. strain PCC 7120  
C:Date: 14-Dec-2001 #sequence\_revision 14-Dec-2001 #text\_change 09-Jul-2004  
C:Accession: AF2093  
R:Kaneko, T.; Nakamura, Y.; Wolk, C.P.; Kuritz, T.; Sasamoto, S.; Watanabe, A.; Iriguchi  
Nakazaki, N.; Shimpo, S.; Sugimoto, M.; Takazawa, M.; Yamada, M.; Yasuda, M.; Tabata, S  
DNA Res. 8, 205-213, 2001

A:Title: Complete Genomic Sequence of the Filamentous Nitrogen-fixing Cyanobacterium Anan  
A:Reference number: AB1807; MUID:21595285; PMID:11759840  
A:Accession: AF2093  
A:Status: preliminary  
A:Molecule type: DNA  
A:Residues: 1-17 <KUR>  
A:Cross-references: UNIPROT:O52748; GB:BA000019; PIDN:BA074000.1; PID:G17131393; GSPDB:G  
A:Experimental source: strain PCC 7120  
C:Genetics:  
A:Gene: pats

Query Match 18.7%; Score 23; DB 2; Length 17;  
Best Local Similarity 66.7%; Pred. No. 4.5e+03;  
Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 10 QRGPGR 15  
DB 12 ERGSGR 17

RESULT 34  
S39153  
translation elongation factor EF-Tu, chloroplast - common tobacco (fragment)  
C:Species: Nicotiana tabacum (common tobacco)  
C:Date: 07-Apr-1994 #sequence\_revision 07-Apr-1994 #text\_change 05-Dec-1997  
C:Accession: S39153  
R:Murayama, Y.; Matsubayashi, T.; Sugita, M.; Sugitara, M.  
Plant Mol. Biol. 22, 767-774, 1993  
A:Title: Purification of chloroplast elongation factor Tu and cDNA analysis in tobacco: t  
A:Reference number: S36183; MUID:93363910; PMID:8358028  
A:Accession: S39153  
A:Molecule type: protein  
A:Residues: 1-18 <MUR>  
C:Superfamily: translation elongation factor Tu; translation elongation factor Tu homolog  
C:Keywords: chloroplast; GTP binding; protein biosynthesis

Query Match 18.7%; Score 23; DB 2; Length 18;  
Best Local Similarity 71.4%; Pred. No. 4.8e+03;  
Matches 5; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 18 VTIGKIG 24  
DB 12 VNIGTIG 18

RESULT 35  
I49037  
TcR delta chain V-D-J region - mouse (fragment)  
C:Species: Mus musculus (house mouse)  
C:Date: 21-Jan-1994 #sequence\_revision 18-Nov-1994 #text\_change 05-Nov-1999  
C:Accession: I49037  
R:Ezquerria, A.; Wilde, D.B.; McConnell, T.J.; Sturmhofel, K.; Valas, R.B.; Shevach, E.M.;  
Eur. J. Immunol. 22, 491-498, 1992  
A:Title: Mouse autoreactive gamma/delta T cells. II. Molecular characterization of the T  
A:Reference number: A49037; MUID:92164730; PMID:1311262  
A:Accession: I49037  
A:Status: preliminary  
A:Molecule type: DNA  
A:Residues: 1-19 <EZO>  
A:Cross-references: GB:S90660; NID:G246304; PIDN:AAB21555.1; PID:G246305  
A:Experimental source: dendritic epidermal T-cell lines  
A:Note: sequence extracted from NCBI backbone (NCBI:90660, NCBIP:90671)

Query Match 18.7%; Score 23; DB 2; Length 19;  
Best Local Similarity 50.0%; Pred. No. 5e+03;  
Matches 6; Conservative 1; Mismatches 5; Indels 0; Gaps 0;

QY 12 GPGRAFTVIGKI 23  
DB 2 GGGRIWRLIGGI 13

RESULT 36



RESULT 40  
S65629  
protoporphyrinogen oxidase (EC 1.3.3.4) - bovine (fragment)  
C:Species: Bos primigenius taurus (cattle)  
C:Date: 14-Feb-1997 #sequence\_revision 13-Mar-1997 #text\_change 26-May-2000  
C:Accession: S65629  
R:Taketani, S.; Yoshinaga, T.; Furukawa, T.; Kohno, H.; Tokunaga, R.; Nishimura, K.; Ino,  
Eur. J. Biochem. 230, 760-765, 1995  
A:Title: Induction of terminal enzymes for heme biosynthesis during differentiation of m  
A:Reference number: S65629; MUID:9531315; PMID:7607249  
A:Accession: S65629  
A:Molecule type: protein  
A:Residues: 1-12 <TAK>  
C:Genetics:  
A:Genome: nuclear  
C:Function:  
A:Pathway: heme biosynthesis; porphyrin biosynthesis  
C:Superfamily: phytoene dehydrogenase  
C:Keywords: heme biosynthesis; mitochondrion; oxidoreductase; porphyrin biosynthesis

Query Match 17.9%; Score 22; DB 2; Length 12;  
Best Local Similarity 50.0%; Pred. No. 4.7e+03;  
Matches 4; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 14 GRAFTVIG 21  
||| : :  
Db 1 GRTVVVLG 8

RESULT 41  
PH1771  
T cell receptor alpha chain V region (clone 2V alpha 23-2) - human (fragment)  
C:Species: Homo sapiens (man)  
C:Date: 16-Jul-1999 #sequence\_revision 16-Jul-1999 #text\_change 16-Jul-1999  
C:Accession: PH1771  
R:Porcellini, S.; Yockey, C.E.; Brenner, M.B.; Balk, S.P.  
J. Exp. Med. 178, 1-16, 1993  
A:Title: Analysis of T cell antigen receptor (TCR) expression by human peripheral blood  
A:Reference number: PH1754; MUID:93301585; PMID:8391057  
A:Accession: PH1771  
A:Status: preliminary  
A:Molecule type: mRNA  
A:Residues: 1-16 <POR>

Query Match 17.9%; Score 22; DB 2; Length 16;  
Best Local Similarity 36.4%; Pred. No. 6.1e+03;  
Matches 4; Conservative 3; Mismatches 4; Indels 0; Gaps 0;

QY 2 NTRKSERIQRG 12  
||| : :  
Db 6 NTRTASKLTGF 16

RESULT 42  
H41299  
T-cell receptor alpha chain precursor J region (40) - human (fragment)  
C:Species: Homo sapiens (man)  
C:Date: 28-May-1992 #sequence\_revision 28-May-1992 #text\_change 05-Nov-1999  
C:Accession: H41299  
R:Uenatsu, Y.; Wege, H.; Straus, A.; Ott, M.; Bannwarth, W.; Lanchbury, J.; Panay, G.;  
Proc. Natl. Acad. Sci. U.S.A. 88, 8534-8538, 1991  
A:Title: The T-cell receptor repertoire in the synovial fluid of a patient with rheumatoid  
A:Reference number: A41299; MUID:92020887; PMID:1656449  
A:Accession: H41299  
A:Status: preliminary  
A:Molecule type: mRNA  
A:Residues: 1-16 <UEM>  
A:Cross-references: GB:S57504; NID:9236332; PIDN:AAB19963.1; PID:9236333  
C:Keywords: T-cell receptor

Query Match 17.9%; Score 22; DB 2; Length 16;  
Best Local Similarity 28.6%; Pred. No. 6.1e+03;

Matches 4; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 7 BRIQRGPGRAFVTI 20  
::: ||| :  
Db 2 DKVIFGPGTSLSVI 15

RESULT 43  
S66213  
glucose 1-dehydrogenase (EC 1.1.1.47) - Haloferax mediterranei (fragment)  
C:Species: Haloferax mediterranei  
C:Date: 14-Feb-1997 #sequence\_revision 13-Mar-1997 #text\_change 09-Jul-2004  
C:Accession: S66213  
R:Bonete, M.J.; Pire, C.; Llorca, F.I.; Camacho, M.L.  
FEBS Lett. 383, 227-229, 1996  
A:Title: Glucose dehydrogenase from the halophilic Archaeon Haloferax mediterranei: enzym  
A:Reference number: S66213; MUID:96198607; PMID:8925901  
A:Accession: S66213  
A:Status: preliminary  
A:Molecule type: protein  
A:Residues: 1-17 <BON>  
A:Cross-references: UNIPROT:Q977U7  
C:Keywords: oxidoreductase

Query Match 17.9%; Score 22; DB 2; Length 17;  
Best Local Similarity 35.7%; Pred. No. 6.5e+03;  
Matches 5; Conservative 3; Mismatches 6; Indels 0; Gaps 0;

QY 5 KSERIQRGPGRAFV 18  
||| : :  
Db 2 KAIIVKRGEDRPV 15

RESULT 44  
A33361  
cAMP-regulated phosphoprotein, 21K - rat (fragment)  
C:Species: Rattus norvegicus (Norway rat)  
C:Date: 08-Dec-1989 #sequence\_revision 08-Dec-1989 #text\_change 09-Jul-2004  
C:Accession: A33361  
R:Hemmings Jr., H.C.; Girault, J.A.; Williams, K.R.; LoPresti, M.B.; Greengard, P.  
J. Biol. Chem. 264, 7726-7733, 1989  
A:Title: ARPP-21, a cyclic AMP-regulated phosphoprotein (M-r=21,000) enriched in dopamine  
netic studies of its phosphorylation in vitro.  
A:Reference number: A33361; MUID:89214228; PMID:2540203  
A:Accession: A33361  
A:Status: preliminary  
A:Molecule type: protein  
A:Residues: 1-19 <HEM>  
A:Cross-references: UNIPROT:Q7M049  
C:Keywords: phosphoprotein

Query Match 17.9%; Score 22; DB 2; Length 19;  
Best Local Similarity 26.7%; Pred. No. 7.2e+03;  
Matches 4; Conservative 3; Mismatches 8; Indels 0; Gaps 0;

QY 1 NNTKRSERIQRGPG 15  
||| : :  
Db 4 NQERRKSKGAGK 18

RESULT 45  
B48138  
d(TTAGGG)n-binding protein B39 - human (fragment)  
N:Alternate names: type B heterogeneous nuclear ribonucleoprotein homolog  
C:Species: Homo sapiens (man)  
C:Date: 16-Feb-1994 #sequence\_revision 18-Nov-1994 #text\_change 16-Aug-2004  
C:Accession: B48138  
R:Ishikawa, F.; Matunis, M.J.; Dreyfuss, G.; Cech, T.R.  
Mol. Cell. Biol. 13, 4301-4310, 1993  
A:Title: Nuclear proteins that bind the pre-mRNA 3' splice site sequence r(UUAG/G) and t  
A:Reference number: A48138; MUID:93309464; PMID:8321232  
A:Accession: B48138  
A:Status: preliminary

A:Molecule type: protein  
A:Residues: 1-19 <ISH>  
A:Cross-references: UNIPROT:Q9UCE9  
A:Experimental source: HeLa cell nuclei  
A>Note: sequence extracted from NCBI backbone (NCBIP:134644)  
C:Superfamily: ribonucleoprotein repeat homology

Query Match 17.9%; Score 22; DB 2; Length 19;  
Best Local Similarity 37.5%; Pred. No. 7.2e+03;  
Matches 3; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

OY 4 RKSERIOR 11  
Db 8 KESERVDK 15

Search completed: May 16, 2005, 13:07:13  
Job time : 29.9231 secs

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: May 16, 2005, 12:39:11 ; Search time 85.7692 Seconds  
(without alignments)  
89.556 Million cell updates/sec

Title: US-08-869-386-1

Perfect score: 77  
Sequence: 1 IQRGPGRAFTVIGK 15

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 16988

Minimum DB seq length: 0  
Maximum DB seq length: 25

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : UniProt\_03.\*  
1: uniprot\_sprot.\*  
2: uniprot\_trembl.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID    | Description        |
|------------|-------|-------------|--------|----------|--------------------|
| 1          | 42    | 54.5        | 25     | 2 O10481 | O10481 human immun |
| 2          | 42    | 54.5        | 25     | 2 Q7ZJT3 | Q7ZJT3 human immun |
| 3          | 35    | 45.5        | 23     | 2 Q9E8S7 | Q9E8S7 human immun |
| 4          | 35    | 45.5        | 23     | 2 Q9ENM9 | Q9ENM9 human immun |
| 5          | 35    | 45.5        | 25     | 2 Q8AQX9 | Q8AQX9 human immun |
| 6          | 35    | 45.5        | 25     | 2 Q8AQY0 | Q8AQY0 human immun |
| 7          | 31    | 40.3        | 25     | 2 Q9QEX7 | Q9QEX7 human immun |
| 8          | 29    | 37.7        | 22     | 2 Q9U2M7 | Q9U2M7 sechium edu |
| 9          | 28    | 36.4        | 25     | 2 Q8AQY1 | Q8AQY1 human immun |
| 10         | 28    | 36.4        | 25     | 2 Q8AQY2 | Q8AQY2 human immun |
| 11         | 27    | 35.1        | 16     | 2 Q9UCK9 | Q9UCK9 homo sapien |
| 12         | 27    | 35.1        | 16     | 2 Q9UCL0 | Q9UCL0 homo sapien |
| 13         | 27    | 35.1        | 17     | 2 Q16228 | Q16228 homo sapien |
| 14         | 27    | 35.1        | 19     | 2 Q6EMLO | Q6EMLO melesgris g |
| 15         | 27    | 35.1        | 19     | 2 Q6EML1 | Q6EML1 gallus gall |
| 16         | 27    | 35.1        | 22     | 2 Q924C7 | Q924C7 mus musculu |
| 17         | 26.5  | 34.4        | 14     | 2 Q7M1W9 | Q7M1W9 arabidopsis |
| 18         | 26    | 33.8        | 20     | 2 Q6JCN3 | Q6JCN3 escherichia |
| 19         | 26    | 33.8        | 21     | 2 Q95K34 | Q95K34 ovis aries  |
| 20         | 26    | 33.8        | 21     | 2 Q6RCK2 | Q6RCK2 pseudomonas |
| 21         | 26    | 33.8        | 23     | 2 Q6U2M9 | Q6U2M9 momordica c |
| 22         | 26    | 33.8        | 24     | 2 Q6TQT6 | Q6TQT6 saccharomyc |
| 23         | 26    | 33.8        | 24     | 2 Q6U2N2 | Q6U2N2 citrullus l |
| 24         | 25    | 32.5        | 10     | 2 Q7M1V8 | Q7M1V8 nicotiana p |
| 25         | 25    | 32.5        | 12     | 2 Q84038 | Q84038 influenza a |
| 26         | 25    | 32.5        | 14     | 2 Q9P2A2 | Q9P2A2 homo sapien |
| 27         | 25    | 32.5        | 19     | 2 Q90630 | Q90630 cercopithec |
| 28         | 25    | 32.5        | 19     | 2 Q90633 | Q90633 cercopithec |
| 29         | 25    | 32.5        | 20     | 2 Q7R974 | Q7R974 plasmodium  |
| 30         | 25    | 32.5        | 20     | 2 Q9PWQ4 | Q9PWQ4 gallus gall |
| 31         | 25    | 32.5        | 22     | 2 Q6V0X7 | Q6V0X7 serratia ma |

32 24.5 31.8 17 2 Q7M2M8  
33 24 31.2 15 2 Q69173  
34 24 31.2 19 2 Q8UHU2  
35 24 31.2 19 2 Q8UVE0  
36 24 31.2 20 2 Q9R4H4  
37 24 31.2 22 2 Q9AH71  
38 24 31.2 25 1 BLP4\_BOMOR  
39 23.5 30.5 16 2 Q8JH96  
40 23.5 30.5 16 2 Q8JH97  
41 23.5 30.5 21 2 Q9TRK1  
42 23 29.9 10 1 COXO\_RAT  
43 23 29.9 11 2 Q7S0C5  
44 23 29.9 14 2 Q7PE81  
45 23 29.9 15 1 UC19\_MAIZE

Q7m2m8 bos taurus  
Q69173 versinia pe  
Q8uuh2 gallus gall  
Q8uue0 gallus gall  
Q9r4h4 desulfovibr  
Q9ah71 neisseria m  
P29005 bombina ori  
Q8jh96 anthus spin  
Q8jh97 anthus prat  
Q9trk1 canis famil  
P80432 rattus norv  
Q7s0c5 neosporea  
Q7pe81 anopheles g  
P80625 zea mays (m

ALIGNMENTS

RESULT 1  
O10481 PRELIMINARY; PRT; 25 AA.  
AC O10481;  
DT 01-JUL-1997 (TREMBLrel. 04, Created)  
DT 01-JUL-1997 (TREMBLrel. 04, Last sequence update)  
DE 01-JUN-2003 (TREMBLrel. 24, Last annotation update)  
DE Envelope glycoprotein (Fragment).  
GN Name=env;  
OS Human immunodeficiency virus 1.  
OC Viruses; Retroid viruses; Retroviridae; Lentivirus.  
OX NCBI\_TaxID=11676;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=97255649; PubMed=9100996;  
RA Rencher S.D., Lockey T.D., Slobod K.S., Hurwitz J.L.;  
RT "Drift from the GPRAP HIV-1 envelope V3 crown sequence in a North  
RT American inner city.";  
RL AIDS Res. Hum. Retroviruses 13:527-528 (1997).  
DR EMBL; U81241; AAB53843.1; -;  
DR GO; GO:0016021; C: integral to membrane; IEA.  
DR GO; GO:0019028; C: viral capsid; IEA.  
DR GO; GO:0019031; C: viral envelope; IEA.  
DR GO; GO:0005198; F: structural molecule activity; IEA.  
DR InterPro; IPR000777; GP120.  
DR InterPro; IPR011056; Pept\_S24\_S26\_C.  
DR Pfam; PF00516; GP120; 1.  
KW AIDS; Coat protein; Envelope protein; Glycoprotein; Transmembrane.  
FT NON\_TER 1 25  
FT NON\_TER 25  
SQ SEQUENCE 25 AA; 2801 MW; 25E1B150CD7C14B6 CRC64;

Query Match 54.5%; Score 42; DB 2; Length 25;  
Best Local Similarity 69.2%; Pred. No. 4.2;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 2 IQRGPGRAFTVIG 14  
Db 12 IHIGGPGRAFTVTKG 24

RESULT 2  
Q7ZJT3 PRELIMINARY; PRT; 25 AA.  
AC Q7ZJT3;  
DT 01-JUN-2003 (TREMBLrel. 24, Created)  
DT 01-JUN-2003 (TREMBLrel. 24, Last sequence update)  
DE 01-MAR-2004 (TREMBLrel. 26, Last annotation update)  
DE Envelope glycoprotein (Fragment).  
GN Name=env;  
OS Human immunodeficiency virus 1.  
OC Viruses; Retroid viruses; Retroviridae; Lentivirus.  
OX NCBI\_TaxID=11676;  
RN [1]

RP SEQUENCE FROM N.A.  
RX MEDLINE=2243926; PubMed=12552446;  
RA Iversen A.K.N., Christensen C.B., Attermann J., Eugen-Olsen J.,  
RA Schulman S., Bertorp E., Ingerslev J., Fugger L., Scheibel E.,  
RA Tengborn L., Gerstoft J., Dickmeiss E., Svejgaard A., Skinhof P.,  
RT "Limited protective effect of the CCR5Delta32/CCR5Delta32 genotype on  
RT human immunodeficiency virus infection incidence in a cohort of  
RT patients with hemophilia and selection for genotypic X4 virus";  
RL J. Infect. Dis. 187:215-225(2003).  
DR EMBL; AY150666; AAO61698.1; -;  
DR GO; GO:0016021; C:integral to membrane; IEA.  
DR GO; GO:0019028; C:viral capsid; IEA.  
DR GO; GO:0019031; C:viral envelope; IEA.  
DR GO; GO:0005198; F:structural molecule activity; IEA.  
DR InterPro; IPR000777; GP120.  
DR Pfam; PF00516; GP120; 1.  
KW AIDS; Coat protein; Envelope protein; Glycoprotein; Transmembrane.  
FT NON\_TER 1 1  
FT NON\_TER 25 25  
SQ SEQUENCE 25 AA; 2790 MW; CB4779D487B5698D2 CRC64;  
  
Query Match 54.5%; Score 42; DB 2; Length 25;  
Best Local Similarity 50.0%; Pred. No. 4.2;  
Matches 7; Conservative 2; Mismatches 5; Indels 0; Gaps 0;  
  
QY 1 RIQGPGRFVTIG 14  
Db 1 RLMSGPGRVYITG 14  
  
RESULT 3  
QSE87  
ID Q9E8S7 PRELIMINARY; PRT; 23 AA.  
AC Q9E8S7;  
DT 01-MAR-2001 (TrEMBLrel. 16, Created)  
DT 01-MAR-2001 (TrEMBLrel. 16, Last sequence update)  
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)  
DE Envelope glycoprotein (Fragment).  
GN Name=env;  
OS Human immunodeficiency virus 1.  
OC Viruses; Retroid viruses; Retroviridae; Lentivirus.  
OX NCBI\_TaxID=11676;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=20411423; PubMed=10954550;  
RX DOI=10.1128/JVI.74.18.8494-8501.2000;  
RA Nelson J.A.E., Baribaud F., Edwards T., Swanstrom R.,  
RT "Patterns of changes in human immunodeficiency virus type 1 V3  
RT sequence populations late in infection.";  
RL J. Virol. 74:8494-8501(2000).  
DR EMBL; AF155888; AAG09930.1; -;  
DR GO; GO:0019031; C:viral envelope; IEA.  
DR InterPro; IPR01056; Pept\_S24\_S26\_C.  
KW Envelope protein.  
FT NON\_TER 1 1  
FT NON\_TER 23 23  
SQ SEQUENCE 23 AA; 2596 MW; 6C038F27BC0CA1E0 CRC64;  
  
Query Match 45.5%; Score 35; DB 2; Length 23;  
Best Local Similarity 60.0%; Pred. No. 71;  
Matches 6; Conservative 1; Mismatches 3; Indels 0; Gaps 0;  
  
QY 5 GPGKAFVTIG 14  
Db 11 GPGKAFYATG 20  
  
RESULT 4  
Q9ENM9  
ID Q9ENM9 PRELIMINARY; PRT; 23 AA.  
AC Q9ENM9;  
DT 01-MAR-2001 (TrEMBLrel. 16, Created)  
DT 01-MAR-2001 (TrEMBLrel. 16, Last sequence update)

DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)  
DE Envelope glycoprotein (Fragment).  
GN Name=env;  
OS Human immunodeficiency virus 1.  
OC Viruses; Retroid viruses; Retroviridae; Lentivirus.  
OX NCBI\_TaxID=11676;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=20411423; PubMed=10954550;  
RX DOI=10.1128/JVI.74.18.8494-8501.2000;  
RA Nelson J.A.E., Baribaud F., Edwards T., Swanstrom R.,  
RT "Patterns of changes in human immunodeficiency virus type 1 V3  
RT sequence populations late in infection.";  
RL J. Virol. 74:8494-8501(2000).  
DR EMBL; AF092639; AAD04382.1; -;  
DR GO; GO:0019031; C:viral envelope; IEA.  
KW Envelope protein.  
FT NON\_TER 1 1  
FT NON\_TER 23 23  
SQ SEQUENCE 23 AA; 2460 MW; 6108EAF9C0CA947 CRC64;  
  
Query Match 45.5%; Score 35; DB 2; Length 23;  
Best Local Similarity 60.0%; Pred. No. 71;  
Matches 6; Conservative 1; Mismatches 3; Indels 0; Gaps 0;  
  
QY 5 GPGKAFVTIG 14  
Db 11 GPGKAFYATG 20  
  
RESULT 5  
Q8AQX9  
ID Q8AQX9 PRELIMINARY; PRT; 25 AA.  
AC Q8AQX9;  
DT 01-MAR-2003 (TrEMBLrel. 23, Created)  
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)  
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)  
DE Envelope glycoprotein (Fragment).  
GN Name=env;  
OS Human immunodeficiency virus 1.  
OC Viruses; Retroid viruses; Retroviridae; Lentivirus.  
OX NCBI\_TaxID=11676;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=22860939; PubMed=14502005;  
RX Freil S.A., Fiscus S.A., Pilcher C.D., Menezes P., Giner J.,  
RA Patrick E., Lennox J.L., Hicks C.B., Eron J.J. Jr., Shugars D.C.,  
RT "Envelope diversity, coreceptor usage and syncytium-inducing phenotype  
RT of HIV-1 variants in saliva and blood during primary infection.";  
RL AIDS 17:2025-2033(2003).  
DR EMBL; AF536914; AAN63929.1; -;  
DR GO; GO:0016021; C:integral to membrane; IEA.  
DR GO; GO:0019028; C:viral capsid; IEA.  
DR GO; GO:0019031; C:viral envelope; IEA.  
DR GO; GO:0005198; F:structural molecule activity; IEA.  
DR InterPro; IPR000777; GP120.  
KW Envelope protein.  
FT NON\_TER 1 1  
FT NON\_TER 25 25  
SQ SEQUENCE 25 AA; 2749 MW; 9B6B9DACH8D56C0C CRC64;  
  
Query Match 45.5%; Score 35; DB 2; Length 25;  
Best Local Similarity 77.8%; Pred. No. 77;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2 IORGPGRAF 10  
Db 8 INIGPGRAF 16  
  
RESULT 6  
Q8AQY0  
ID Q8AQY0 PRELIMINARY; PRT; 25 AA.



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AC O8AQY0;
DT 01-MAR-2003 (TRENBLrel. 23, Created)
DT 01-MAR-2003 (TRENBLrel. 23, Last sequence update)
DT 01-OCT-2003 (TRENBLrel. 25, Last annotation update)
DE Envelope glycoprotein (Fragment).
GN Name=env;
OS Human immunodeficiency virus 1.
OC Viruses; Retroid viruses; Retroviridae; Lentivirus.
OX NCB1_TaxID=11676;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22860939; PubMed=14502005;
RA Freil S.A., Fiscus S.A., Pilcher C.D., Menezes P., Giner J.,
RA Patrick E., Lennox J.L., Hicks C.B., Eron J.J. Jr., Shugars D.C.;
RT "Envelope diversity, coreceptor usage and syncytium-inducing phenotype
RT of HIV-1 variants in saliva and blood during primary infection.";
RL AIDS 17:2025-2033(2003).
DR EMBL; AF536913; AANG3928.1; -.
DR GO; GO:0016021; C:integral to membrane; IEA.
DR GO; GO:0019028; C:viral capsid; IEA.
DR GO; GO:0019031; C:viral envelope; IEA.
DR GO; GO:0005198; F:structural molecule activity; IEA.
DR InterPro; IPR000777; GP120.
KW Envelope protein.
FT NON_TER 1
FT NON_TER 25
SQ SEQUENCE 25 AA; 2749 MW; 9B6E9DACB8D56C0C CRC64;

Query Match 45.5%; Score 35; DB 2; Length 25;
Best Local Similarity 77.8%; Pred. No. 77;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2 IQRGPGRAF 10
Db 8 INIGPGRAF 16

RESULT 7
Q9QEX7
ID Q9QEX7 PRELIMINARY; PRT; 25 AA.
AC Q9QEX7;
DT 01-MAY-2000 (TRENBLrel. 13, Created)
DT 01-MAY-2000 (TRENBLrel. 13, Last sequence update)
DT 01-JUN-2003 (TRENBLrel. 24, Last annotation update)
DE Envelope glycoprotein (Fragment).
GN Name=env;
OS Human immunodeficiency virus 1.
OC Viruses; Retroid viruses; Retroviridae; Lentivirus.
OX NCB1_TaxID=11676;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=21103026; PubMed=11170057;
RX DOI=10.1002/1096-9071(200103)63:3<197::AID-JMV1000>3.3.CO;2-G;
RA Lin H.J., Siwak E.B., Lauder J.J., Hollinger F.B.;
RT "Long-term culture of human immunodeficiency virus type 1 resulting in
RT loss of glycosylation sites.";
RL J. Med. Virol. 63:197-202(2001).
DR EMBL; AF178663; AAF04369.1; -.
DR GO; GO:0016021; C:integral to membrane; IEA.
DR GO; GO:0019028; C:viral capsid; IEA.
DR GO; GO:0019031; C:viral envelope; IEA.
DR GO; GO:0005198; F:structural molecule activity; IEA.
DR InterPro; IPR000777; GP120.
DR InterPro; IPR011056; Pept_S24_S26_C.
DR Pfam; PF00516; GP120; 1.
KW AIDS; Coat protein; Envelope protein; Glycoprotein; Transmembrane.
FT NON_TER 1
FT NON_TER 25
SQ SEQUENCE 25 AA; 2818 MW; 9C6EBA908EB5ED47 CRC64;

Query Match 40.3%; Score 31; DB 2; Length 25;
Best Local Similarity 53.8%; Pred. No. 4e+02;
Matches 7; Conservative 1; Mismatches 5; Indels 0; Gaps 0;

O8AQY1
ID O8AQY1 PRELIMINARY; PRT; 25 AA.
AC O8AQY1;
DT 01-MAR-2003 (TRENBLrel. 23, Created)
DT 01-MAR-2003 (TRENBLrel. 23, Last sequence update)
DT 01-OCT-2003 (TRENBLrel. 25, Last annotation update)
DE Envelope glycoprotein (Fragment).
GN Name=env;
OS Human immunodeficiency virus 1.
OC Viruses; Retroid viruses; Retroviridae; Lentivirus.
OX NCB1_TaxID=11676;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22860939; PubMed=14502005;
RA Freil S.A., Fiscus S.A., Pilcher C.D., Menezes P., Giner J.,
RA Patrick E., Lennox J.L., Hicks C.B., Eron J.J. Jr., Shugars D.C.;
RT "Envelope diversity, coreceptor usage and syncytium-inducing phenotype
RT of HIV-1 variants in saliva and blood during primary infection.";
RL AIDS 17:2025-2033(2003).
DR EMBL; AF536912; AANG3927.1; -.
DR GO; GO:0019031; C:viral envelope; IEA.
DR InterPro; IPR000777; GP120.
KW Envelope protein.
FT NON_TER 1
FT NON_TER 25
SQ SEQUENCE 25 AA; 2601 MW; 71B5A774CE256C09 CRC64;

Query Match 36.4%; Score 28; DB 2; Length 25;
Best Local Similarity 66.7%; Pred. No. 1.4e+03;

Qy 6 PGRAFT 12
Db 16 PKRAFT 22

Query Match 37.7%; Score 29; DB 2; Length 22;
Best Local Similarity 85.7%; Pred. No. 8.2e+02;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 IQRGPGRAFVTIG 14
Db 13 IPLQGGRWFTTG 25

RESULT 8
Q6U2M7
ID Q6U2M7 PRELIMINARY; PRT; 22 AA.
AC Q6U2M7;
DT 05-JUL-2004 (TRENBLrel. 27, Created)
DT 05-JUL-2004 (TRENBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TRENBLrel. 27, Last annotation update)
DE Galactinol synthase (EC 2.4.1.123) (Fragment).
GN Name=GASI;
OS Scchium edule.
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;
OC eucosids 1; Cucurbitales; Cucurbitaceae; Scchium.
OX NCB1_TaxID=184140;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22975109; PubMed=14526110; DOI=10.1104/pp.103.027714;
RA Ayre B.G., Blair J.E., Turgeon R.;
RT "Functional and phylogenetic analyses of a conserved regulatory
RT program in the phloem of minor veins.";
RL Plant Physiol. 133:1229-1239(2003).
DR EMBL; AY379782; AA074884.1; -.
DR GO; GO:0047216; F:inositol 3-alpha-galactosyltransferase acti. .; IEA.
DR GO; GO:0016757; F:transferase activity, transferring glycosyl. .; IEA.
KW Glycosyltransferase; Transferase.
FT NON_TER 22
FT NON_TER 22
SQ SEQUENCE 22 AA; 2295 MW; A6673B5BFD06430C CRC64;

Query Match 37.7%; Score 29; DB 2; Length 22;
Best Local Similarity 85.7%; Pred. No. 8.2e+02;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 6 PGRAFT 12
Db 16 PKRAFT 22

Query Match 37.7%; Score 29; DB 2; Length 22;
Best Local Similarity 85.7%; Pred. No. 8.2e+02;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Matches 6; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2 IORGPGRAF 10
Db 8 IHIGPGGAF 16

RESULT 10
Q8AQY2 PRELIMINARY; PRT; 25 AA.
AC Q8AQY2;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Envelope glycoprotein (Fragment).
GN Name=env;
OS Human immunodeficiency virus 1.
OC Viruses; Retroviridae; Retroviridae; Lentivirus.
OX NCBI_TaxID=11676;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22860939; PubMed=14502005;
RA Freil S.A., Fiscus S.A., Pilcher C.D., Menezes P., Giner J.,
RA Patrick E., Lennox J.L., Hicks C.B., Eron J.J. Jr., Shugars D.C.;
RT "Envelope diversity, coreceptor usage and syncytium-inducing phenotype
RT of HIV-1 variants in saliva and blood during primary infection.";
RL AIDS 17:2025-2033(2003).
DR EMBL; AF536911; AA063926.1; -.
DR GO; GO:0019031; C:Viral envelope; IEA.
DR InterPro; IPR000777; GP120.
KW Envelope protein.
FT NON_TER 1
FT NON_TER 25
SQ SEQUENCE 25 AA; 2601 MW; 71B5A77ACE256C09 CRC64;

Query Match 36.4%; Score 28; DB 2; Length 25;
Best Local Similarity 66.7%; Pred. No. 1.4e+03;
Matches 6; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2 IORGPGRAF 10
Db 8 IHIGPGGAF 16

RESULT 11
Q9UCK9 PRELIMINARY; PRT; 16 AA.
AC Q9UCK9;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE Serum amyloid A isotype 2 alpha protein (Serum amyloid A protein)
DE (Fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE.
RX MEDLINE=93099171; PubMed=1463770; DOI=10.1016/0925-4439(92)90068-X;
RA Baba S., Takahashi T., Kasama T., Shirasawa H.;
RA Gruning G., Millan J.M., Meins M., Beneyto M., Caballero M.,
RA Apfelstedt-Sylla E., Bosch R., Zrenner E., Prieto F., Gal A.;
RT "Identification of two novel amyloid A protein subsets coexisting in
RT an individual patient of AA-amyloidosis.";
RL Blochim. Biophys. Acta 1180:195-200(1992).
DR EMBL; AF2902; YLHUA.
DR GO; GO:0005576; C:extracellular; IEA.
DR GO; GO:0006953; P:acute-phase response; IEA.
DR InterPro; IPR000096; Serum_amyloid_A.
DR Pfam; PF00277; SAA; 1.
SQ SEQUENCE 16 AA; 1612 MW; 1CAB4F077C9C8CC1 CRC64;

Query Match 35.1%; Score 27; DB 2; Length 16;
Best Local Similarity 71.4%; Pred. No. 1.4e+03;
Matches 6; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2 IORGPGRAF 10
Db 8 IHIGPGGAF 16

RESULT 12
Q9UCL0 PRELIMINARY; PRT; 16 AA.
AC Q9UCL0;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE Serum amyloid A isotype 1 protein (Serum amyloid A protein)
DE (Fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE.
RX MEDLINE=93099171; PubMed=1463770; DOI=10.1016/0925-4439(92)90068-X;
RA Baba S., Takahashi T., Kasama T., Shirasawa H.;
RA "Identification of two novel amyloid A protein subsets coexisting in
RT an individual patient of AA-amyloidosis.";
RL Biochim. Biophys. Acta 1180:195-200(1992).
DR GO; GO:0005576; C:extracellular; IEA.
DR GO; GO:0006953; P:acute-phase response; IEA.
DR InterPro; IPR000096; Serum_amyloid_A.
DR Pfam; PF00277; SAA; 1.
SQ SEQUENCE 16 AA; 1585 MW; 1CAB41E77C839CC1 CRC64;

Query Match 35.1%; Score 27; DB 2; Length 16;
Best Local Similarity 71.4%; Pred. No. 1.4e+03;
Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 4 RGPGRAP 10
Db 1 RGPGGAW 7

RESULT 13
Q16228 PRELIMINARY; PRT; 17 AA.
AC Q16228;
DT 01-NOV-1996 (TrEMBLrel. 01, Created)
DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT 01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
DE Peripherin (Fragment).
GN Name=rds;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=94290510; PubMed=8019570;
RA Gruning G., Millan J.M., Meins M., Beneyto M., Caballero M.,
RA Apfelstedt-Sylla E., Bosch R., Zrenner E., Prieto F., Gal A.;
RT "Mutations in the human peripherin/RDS gene associated with autosomal
RT dominant retinitis pigmentosa.";
RL Hum. Mutat. 3:321-323(1994).
DR EMBL; S73627; AAB31191.1; -.
DR NON_TER 17
DR NON_TER 17
SQ SEQUENCE 17 AA; 2342 MW; 96828BA695A9D1EB CRC64;

Query Match 35.1%; Score 27; DB 2; Length 17;
Best Local Similarity 60.0%; Pred. No. 1.5e+03;
Matches 6; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 RIQGFGRAP 10
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Db      5 RACRRPGRPF 14
RESULT 14
Q6EMLO PRELIMINARY; PRT; 19 AA.
AC Q6EMLO;
DT 25-OCT-2004 (TrEMBLrel. 28, Created)
DT 25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
DT 25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
DE B-creatine kinase (Fragment).
OS Meleagris gallopavo (Common turkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Meleagris.
OX NCBI_TaxID=9103;
RN [1]
RP SEQUENCE FROM N.A.
RX PubMed:15140948; DOI=10.1093/molbev/msh157;
RA Axelsson E., Smith N.G., Sundstrom H., Berlin S., Ellegren H.;
RT "Male-biased mutation rate and divergence in autosomal, z-linked and
RT w-linked introns of chicken and Turkey.";
RL Mol. Biol. Evol. 21:1538-1547(2004).
DR EMBL; AY139863; AAN74867.1; -.
DR GO; GO:0016301; F:kinase activity; IEA.
DR GO; GO:0016772; F:transferase activity, transferring phosphor. . .; IEA.
DR InterPro; IPR000749; ATP_gua_trans.
DR Pfam; PF02807; ATP_gua_trans; 1.
KW Kinase.
FT NON_TER 1 1
FT NON_TER 19 19
SQ SEQUENCE 19 AA; 1985 MW; 79B98E106D048680 CRC64;

Query Match 35.1%; Score 27; DB 2; Length 19;
Best Local Similarity 47.1%; Pred. No. 1.6e+03;
Matches 8; Conservative 2; Mismatches 3; Indels 4; Gaps 2;

Qy 2 IQRG---PGRAPV-TIG 14
||| ||| |||
Db 1 IQTGVDPNGHPFIMTVG 17

RESULT 15
Q6EMLO PRELIMINARY; PRT; 19 AA.
AC Q6EMLO;
DT 25-OCT-2004 (TrEMBLrel. 28, Created)
DT 25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
DT 25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
DE B-creatine kinase (Fragment).
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RX PubMed:15140948; DOI=10.1093/molbev/msh157;
RA Axelsson E., Smith N.G., Sundstrom H., Berlin S., Ellegren H.;
RT "Male-biased mutation rate and divergence in autosomal, z-linked and
RT w-linked introns of chicken and Turkey.";
RL Mol. Biol. Evol. 21:1538-1547(2004).
DR EMBL; AY139862; AAN74866.1; -.
DR GO; GO:0016301; F:kinase activity; IEA.
DR GO; GO:0016772; F:transferase activity, transferring phosphor. . .; IEA.
DR InterPro; IPR000749; ATP_gua_trans.
DR Pfam; PF02807; ATP_gua_trans; 1.
KW Kinase.
FT NON_TER 1 1
FT NON_TER 19 19
SQ SEQUENCE 19 AA; 1985 MW; 79B98E106D048680 CRC64;

Query Match 35.1%; Score 27; DB 2; Length 19;
Best Local Similarity 47.1%; Pred. No. 1.6e+03;
Matches 8; Conservative 2; Mismatches 3; Indels 4; Gaps 2;

Qy 2 IQRG---PGRAPV-TIG 14
||| ||| |||
Db 1 IQTGVDPNGHPFIMTVG 17

RESULT 16
Q924C7 PRELIMINARY; PRT; 22 AA.
AC Q924C7;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Glucagon-like peptide-2 receptor (Fragment).
GN Name=Glp2r;
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=129/SvJ;
RX MEDLINE=21292988; PubMed=11262390; DOI=10.1074/jbc.M009382200;
RA Lovshin J.A., Bstall J., Yusta B., Brown T.J., Drucker D.J.;
RT "Glucagon-like peptide (GLP)-2 action in the murine central nervous
RT system is enhanced by elimination of GLP-1 receptor signaling.";
RL J. Biol. Chem. 276:21489-21499(2001).
DR EMBL; AF338224; AAK63043.1; -.
DR MGD; MGI:2136733; Glp2r.
DR GO; GO:0016021; C:integral to membrane; TAS.
DR GO; GO:0004967; F:glucagon receptor activity; TAS.
DR GO; GO:0007186; P:G-protein coupled receptor protein signalin. . .; TAS.
KW Receptor.
FT NON_TER 22 22
SQ SEQUENCE 22 AA; 2526 MW; 2C5BF53DCCD425C9 CRC64;

Query Match 35.1%; Score 27; DB 2; Length 22;
Best Local Similarity 44.4%; Pred. No. 1.9e+03;
Matches 4; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

Qy 5 GPGRAFVTI 13
||| |||
Db 6 GPGTFPLSL 14

RESULT 17
Q7M1W9 PRELIMINARY; PRT; 14 AA.
AC Q7M1W9;
DT 01-MAR-2004 (TrEMBLrel. 26, Created)
DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE Porin por1 (Fragment).
OS Arabidopsis thaliana (Mouse-ear cress).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;
OC eurosids II; Brassicales; Brassicaceae; Arabidopsis.
OX NCBI_TaxID=3702;
RN [1]
RP SEQUENCE.
RA Kano M., Kawakami T., Miyatake N., Taugita A.;
RL Submitted (JUL-1994) to the PIR data bank.
DR PIR; PA0045; PA0045.
FT NON_TER 1 1
FT NON_TER 14 14
SQ SEQUENCE 14 AA; 1546 MW; 0728ED7FB3BE8FBB CRC64;

Query Match 34.4%; Score 26.5; DB 2; Length 14;
Best Local Similarity 50.0%; Pred. No. 1.5e+03;
Matches 6; Conservative 2; Mismatches 3; Indels 1; Gaps 1;

Qy 4 RGPGRFVTICK 15

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SEQUENCE FROM N.A.  
MEDLINE=22975109; PubMed=14526110; DOI=10.1104/pp.103.027714;

RA Ayre B.G., Blair J.E., Turgeon R.;  
 RT "Functional and phylogenetic analyses of a conserved regulatory  
 program in the phloem of minor veins.";  
 RL Plant Physiol. 133:1229-1239(2003).  
 DR EMBL; AY379780; AAQ74882.1; -.  
 DR GO; GO:0047216; F:inositol 3-alpha-galactosyltransferase acti. .; IEA.  
 DR GO; GO:0016757; F:transferase activity, transferring glycosyl. .; IEA.  
 KW Glycosyltransferase; Transferase.  
 FT. NON TER 23  
 SQ SEQUENCE 23 AA; 2444 MW; 62411699CAB81657 CRC64;

Query Match 33.8%; Score 26; DB 2; Length 23;  
 Best Local Similarity 71.4%; Pred. No. 3e+03;  
 Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 6 PGRAFT 12  
 Db 16 PKRAYVT 22

RESULT 22  
 Q6TQ76 PRELIMINARY; PRT; 24 AA.  
 AC Q6TQ76  
 DT 05-JUL-2004 (TrEMBLrel. 27, Created)  
 DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)  
 DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)  
 DE YHR065Cp (Fragment).  
 GN Name=YHR065C;  
 OS Saccharomyces cerevisiae (Baker's yeast).  
 OC Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;  
 OC Saccharomycetales; Saccharomycetaceae; Saccharomycetes.  
 ON NCBI\_TaxID=4932;  
 RX [1]  
 RP SEQUENCE FROM N.A.  
 RC STRAIN=AB972;  
 RA Kennedy M.C., Dietrich F.S.;  
 RL Submitted (SEP-2003) to the EMBL/GenBank/DBJ databases.  
 DR EMBL; AY389302; AAQ97234.1; -.  
 FT NON TER 1  
 SQ SEQUENCE 24 AA; 2866 MW; 83820AB41EF59E7C CRC64;

Query Match 33.8%; Score 26; DB 2; Length 24;  
 Best Local Similarity 62.5%; Pred. No. 3.1e+03;  
 Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 RIQGPGR 8  
 Db 2 KIARKGR 9

RESULT 23  
 Q6U2N2 PRELIMINARY; PRT; 24 AA.  
 AC Q6U2N2  
 DT 05-JUL-2004 (TrEMBLrel. 27, Created)  
 DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)  
 DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)  
 DE Galactinol synthase (EC 2.4.1.123) (Fragment).  
 GN Name=GAS1;  
 OS Citrullus lanatus (Watermelon) (Citrullus vulgaris).  
 OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
 OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;  
 OC eurosids I; Cucurbitales; Cucurbitaceae; Citrullus.  
 ON NCBI\_TaxID=3654;  
 RX [1]  
 RP SEQUENCE FROM N.A.  
 RC MEDLINE=22975109; PubMed=14526110; DOI=10.1104/pp.103.027714;  
 RA Ayre B.G., Blair J.E., Turgeon R.;  
 RT "Functional and phylogenetic analyses of a conserved regulatory  
 program in the phloem of minor veins.";  
 RL Plant Physiol. 133:1229-1239(2003).  
 DR EMBL; AY379777; AAQ74879.1; -.  
 DR

DR GO; GO:0047216; F:inositol 3-alpha-galactosyltransferase acti. .; IEA.  
 DR GO; GO:0016757; F:transferase activity, transferring glycosyl. .; IEA.  
 KW Glycosyltransferase; Transferase.  
 FT NON TER 24  
 SQ SEQUENCE 24 AA; 2538 MW; E2BC0AE9D7930C06 CRC64;

Query Match 33.8%; Score 26; DB 2; Length 24;  
 Best Local Similarity 71.4%; Pred. No. 3.1e+03;  
 Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 6 PGRAFT 12  
 Db 17 PKRAYVT 23

RESULT 24  
 Q7M1V8 PRELIMINARY; PRT; 10 AA.  
 AC Q7M1V8  
 DT 01-MAR-2004 (TrEMBLrel. 26, Created)  
 DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)  
 DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)  
 DE Protein P7 (Fragment).  
 OS Nicotiana plumbaginifolia (Leadwort-leaved tobacco).  
 OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
 OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; asterids;  
 OC lamids; Solanales; Solanaceae; Nicotiana.  
 ON NCBI\_TaxID=4092;  
 RX [1]  
 RP SEQUENCE.  
 RA Bauw G., De Loose M., Inze D., Van Montagu M., Vandekerckhove J.;  
 RT "Alterations in the phenotype of plant cells studied by NH2-terminal  
 amino acid-sequence analysis of proteins electrophoretically separated from two-  
 dimensional gel-separated total extracts.";  
 RL Proc. Natl. Acad. Sci. U.S.A. 84:4806-4810(1987).  
 DR PIR; D28027; D28027.  
 FT NON TER 1  
 FT NON TER 10  
 SQ SEQUENCE 10 AA; 1016 MW; 2697C972C9D5A408 CRC64;

Query Match 32.5%; Score 25; DB 2; Length 10;  
 Best Local Similarity 71.4%; Pred. No. 2e+03;  
 Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 7 GRAFVTI 13  
 Db 3 GRSPVPI 9

RESULT 25  
 Q84038 PRELIMINARY; PRT; 12 AA.  
 AC Q84038  
 DT 01-NOV-1996 (TrEMBLrel. 01, Created)  
 DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)  
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)  
 DE Influenza A/Epv/rostock/34 (H7N1), neuraminidase (seg 6), 3' end of  
 DE vRNA (initiator region for protein coding) (Fragment).  
 OS Influenza A virus.  
 OC Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;  
 OC Influenzavirus A.  
 ON NCBI\_TaxID=11320;  
 RX [1]  
 RP SEQUENCE FROM N.A.  
 RC MEDLINE=80034428; PubMed=493121;  
 RA Robertson J.S.;  
 RT "5' and 3' terminal nucleotide sequences of the RNA genome segments of  
 influenza virus.";  
 RL Nucleic Acids Res. 6:3745-3757(1979).  
 DR EMBL; J02114; AAA43398.1; -.  
 DR GO; GO:0016020; C:membrane; IEA.  
 DR GO; GO:0004308; F:exo-alpha-sialidase activity; IEA.  
 DR GO; GO:0005975; F:carbohydrate metabolism; IEA.

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DR InterPro; IPR001860; Glyco_hydro_34.
DR Pfam; PF00664; Neur; 1.
FT NON TER 12
SQ SEQUENCE 12 AA; 1316 MW; DC0B3CE899505326 CRC64;

Query Match 32.5%; Score 25; DB 2; Length 12;
Best Local Similarity 44.4%; Pred. No. 2.4e+03;
Matches 4; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

QY 6 PGRFVTIG 14
   : : : :
Db 3 PNQKIITIG 11

RESULT 26
Q9P2A2 PRELIMINARY; PRT; 14 AA.
AC Q9P2A2
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
DE Truncated aldo-keto reductase (fragment).
GN Name=truncated AKR;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Liver;
RX MEDLINE=20138537; PubMed=10672042;
RA Nishizawa M., Nakajima T., Yasuda K., Kanzaki H., Sasaguri Y.,
RA Watanabe K., Ito S.;
RT "Close kinship of human 20alpha-hydroxysteroid dehydrogenase gene with
RT three aldo-keto reductase genes.";
RL Genes Cells 5:111-125(2000).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Liver;
RA Nishizawa M., Nakajima T., Ito S.;
RL Submitted (FEB-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AB037903; BAA92888.1; -.
FT NON TER 1
SQ SEQUENCE 14 AA; 1632 MW; 47EB1EE28D59A8D7 CRC64;

Query Match 32.5%; Score 25; DB 2; Length 14;
Best Local Similarity 80.0%; Pred. No. 2.8e+03;
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 6 PGRAF 10
   : : : :
Db 9 PGRSP 13

RESULT 27
Q90630 PRELIMINARY; PRT; 19 AA.
AC Q90630
DT 01-NOV-1998 (TrEMBLrel. 08, Created)
DT 01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DT 01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
DE Glycoprotein G (Fragment).
GN Name=U4;
OS Carcophthecine herpesvirus 16 (CeHV-16) (Herpesvirus papio 2).
OC Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
OC Alphaherpesvirinae; Simplexvirus.
OX NCBI_TaxID=36347;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=001-76;
RX MEDLINE=98440589; PubMed=9765470;
RA Smith A.L., Black D.H., Eberle R.;
RT "Molecular evidence for distinct genotypes of monkey B virus
RT "Close kinship of human 20alpha-hydroxysteroid dehydrogenase gene with
RT three aldo-keto reductase genes.";
RL Genes Cells 5:111-125(2000).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Liver;
RA Nishizawa M., Nakajima T., Ito S.;
RL Submitted (FEB-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AB037903; BAA92888.1; -.
FT NON TER 1
SQ SEQUENCE 14 AA; 1632 MW; 47EB1EE28D59A8D7 CRC64;

Query Match 32.5%; Score 25; DB 2; Length 12;
Best Local Similarity 62.5%; Pred. No. 3.7e+03;
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 4 RGPGRFV 11
   : : : :
Db 2 RGPGRSRV 9

RESULT 28
Q90633 PRELIMINARY; PRT; 19 AA.
AC Q90633
DT 01-NOV-1998 (TrEMBLrel. 08, Created)
DT 01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DT 01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
DE Glycoprotein G (Fragment).
GN Name=U4;
OS Carcophthecine herpesvirus 16 (CeHV-16) (Herpesvirus papio 2).
OC Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
OC Alphaherpesvirinae; Simplexvirus.
OX NCBI_TaxID=36347;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=A951;
RX MEDLINE=98440589; PubMed=9765470;
RA Smith A.L., Black D.H., Eberle R.;
RT "Molecular evidence for distinct genotypes of monkey B virus
RT "Close kinship of human 20alpha-hydroxysteroid dehydrogenase gene with
RT three aldo-keto reductase genes.";
RL Genes Cells 5:111-125(2000).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Liver;
RA Nishizawa M., Nakajima T., Ito S.;
RL Submitted (FEB-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AB037903; BAA92888.1; -.
FT NON TER 1
SQ SEQUENCE 19 AA; 2148 MW; FF552125C14FE88B CRC64;

Query Match 32.5%; Score 25; DB 2; Length 19;
Best Local Similarity 62.5%; Pred. No. 3.7e+03;
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 4 RGPGRFV 11
   : : : :
Db 2 RGPGRSRV 9

RESULT 29
Q7R974 PRELIMINARY; PRT; 20 AA.
AC Q7R974
DT 01-MAR-2004 (TrEMBLrel. 26, Created)
DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE Hypothetical protein (fragment).
GN Name=PY06991;
OS Plasmodium yoelii yoelii.
OC Eukaryota; Alveolata; Apicomplexa; Haemosporidia; Plasmodium.
OX NCBI_TaxID=73239;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=17XNL;
RX PubMed=12368865; DOI=10.1038/nature01099;
RA Carlton J.M., Anguoli S.V., Suh B.B., Koolij T.W., Perte M.,
RA Silva J.C., Ermolaeva M.D., Allen J.E., Selengut J.D., Koo H.L.,
RA Peterson J.D., Pop M., Kosack D.S., Shumway M.P., Bidwell S.L.,
RA Shallom S.J., van Aken S.E., Riedmuller S.B., Feldblyum T.V.,
RA Cho J.K., Quackenbush J., Sedegah M., Shoab A., Cummings L.M.,
RA Florens L., Yates F.R. III, Raine J.D., Sinden R.E., Harris M.A.,
RA Cunningham D.A., Preiser P.R., Bergman L.W., Vaidya A.B.,
RA van Lin L.H., Janse C.J., Waters A.P., Smith H.O., White O.R.,

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RT (herpesvirus simiae) which are related to the macaque host species.";
RL J. Virol. 72:9224-9232(1998).
DR EMBL; AF082809; AAC34102.1; -.
FT NON TER 1
SQ SEQUENCE 19 AA; 2148 MW; FF552125C14FE88B CRC64;

Query Match 32.5%; Score 25; DB 2; Length 19;
Best Local Similarity 62.5%; Pred. No. 3.7e+03;
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 4 RGPGRFV 11
   : : : :
Db 2 RGPGRSRV 9

RESULT 28
Q90633 PRELIMINARY; PRT; 19 AA.
AC Q90633
DT 01-NOV-1998 (TrEMBLrel. 08, Created)
DT 01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DT 01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
DE Glycoprotein G (Fragment).
GN Name=U4;
OS Carcophthecine herpesvirus 16 (CeHV-16) (Herpesvirus papio 2).
OC Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
OC Alphaherpesvirinae; Simplexvirus.
OX NCBI_TaxID=36347;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=A951;
RX MEDLINE=98440589; PubMed=9765470;
RA Smith A.L., Black D.H., Eberle R.;
RT "Molecular evidence for distinct genotypes of monkey B virus
RT "Close kinship of human 20alpha-hydroxysteroid dehydrogenase gene with
RT three aldo-keto reductase genes.";
RL Genes Cells 5:111-125(2000).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Liver;
RA Nishizawa M., Nakajima T., Ito S.;
RL Submitted (FEB-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AB037903; BAA92888.1; -.
FT NON TER 1
SQ SEQUENCE 19 AA; 2148 MW; FF552125C14FE88B CRC64;

Query Match 32.5%; Score 25; DB 2; Length 19;
Best Local Similarity 62.5%; Pred. No. 3.7e+03;
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 4 RGPGRFV 11
   : : : :
Db 2 RGPGRSRV 9

RESULT 29
Q7R974 PRELIMINARY; PRT; 20 AA.
AC Q7R974
DT 01-MAR-2004 (TrEMBLrel. 26, Created)
DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE Hypothetical protein (fragment).
GN Name=PY06991;
OS Plasmodium yoelii yoelii.
OC Eukaryota; Alveolata; Apicomplexa; Haemosporidia; Plasmodium.
OX NCBI_TaxID=73239;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=17XNL;
RX PubMed=12368865; DOI=10.1038/nature01099;
RA Carlton J.M., Anguoli S.V., Suh B.B., Koolij T.W., Perte M.,
RA Silva J.C., Ermolaeva M.D., Allen J.E., Selengut J.D., Koo H.L.,
RA Peterson J.D., Pop M., Kosack D.S., Shumway M.P., Bidwell S.L.,
RA Shallom S.J., van Aken S.E., Riedmuller S.B., Feldblyum T.V.,
RA Cho J.K., Quackenbush J., Sedegah M., Shoab A., Cummings L.M.,
RA Florens L., Yates F.R. III, Raine J.D., Sinden R.E., Harris M.A.,
RA Cunningham D.A., Preiser P.R., Bergman L.W., Vaidya A.B.,
RA van Lin L.H., Janse C.J., Waters A.P., Smith H.O., White O.R.,

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RA Salzberg S.L., Venter J.C., Fraser C.M., Hoffman S.L., Gardner M.J.,  
 RA Carucci D.J.;  
 RT "Genome sequence and comparative analysis of the model rodent malaria  
 RT parasite Plasmodium yoelii yoelii";  
 RL Nature 419:512-519(2002).  
 CC -!- CAUTION: The sequence shown here is derived from an  
 CC EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is  
 CC preliminary data.  
 DR EMBL; AABL01002466; EAA19325.1; -.  
 KW Hypothetical protein.  
 FT NON TER 20  
 FT SEQUENCE 20 AA; 2461 MW; C583B1AD3B45C3FC CRC64;  
 SQ SEQUENCE 20 AA; 2461 MW; C583B1AD3B45C3FC CRC64;  
 Query Match 32.5%; Score 25; DB 2; Length 20;  
 Best Local Similarity 40.0%; Pred. No. 3.9e+03;  
 Matches 4; Conservative 3; Mismatches 3; Indels 0; Gaps 0;  
 QY 2 IORGGRAPV 11  
 Db 11 MKRGTSRLFI 20  
 RESULT 30  
 Q9PWQ4 PRELIMINARY; PRT; 20 AA.  
 AC Q9PWQ4;  
 DT 01-MAY-2000 (TReMBLrel. 13, Created)  
 DT 01-MAY-2000 (TReMBLrel. 13, Last sequence update)  
 DT 01-MAR-2003 (TReMBLrel. 23, Last annotation update)  
 DE Prolactin (Fragment).  
 GN Name=prl;  
 OS Gallus gallus (Chicken).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Archoeauria; Aves; Neognathae; Galliformes; Phasianinae;  
 OC Gallus  
 OX NCBI\_TaxID=9031;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=20078374; PubMed=10612250;  
 RA Miao Y., Burt D.W., Paton I.R., Sharp P.J., Dunn I.C.;  
 RT "Mapping of the prolactin gene to chicken chromosome 2.";  
 RL Anim. Genet. 30:473-473(1999).  
 DR EMBL; AJ239131; CAB43530.1; -.  
 DR HSSP; P01236; IN9D.  
 FT NON TER 1  
 FT NON TER 20  
 FT SEQUENCE 20 AA; 2223 MW; 258CC8CAA95F12D6 CRC64;  
 SQ SEQUENCE 20 AA; 2223 MW; 258CC8CAA95F12D6 CRC64;  
 Query Match 32.5%; Score 25; DB 2; Length 20;  
 Best Local Similarity 66.7%; Pred. No. 3.9e+03;  
 Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 QY 7 GRGFT 12  
 Db 7 GRGFT 12  
 RESULT 31  
 Q6V0X7 PRELIMINARY; PRT; 22 AA.  
 ID Q6V0X7  
 AC Q6V0X7;  
 DT 05-JUL-2004 (TReMBLrel. 27, Created)  
 DT 05-JUL-2004 (TReMBLrel. 27, Last sequence update)  
 DT 05-JUL-2004 (TReMBLrel. 27, Last annotation update)  
 DE Bacteriocin (Fragment).  
 GN Name=bin;  
 OS Serratia marcescens.  
 OG Plasmid pSWT1.  
 OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;  
 OC Enterobacteriaceae; Serratia.  
 OX NCBI\_TaxID=615;  
 RN [1]  
 RP SEQUENCE FROM N.A.

RA Manzoor S.E., Gill M.J., Thomas C.M.;  
 RL Submitted (JUL-2003) to the EMBL/GenBank/DBJ databases.  
 KW EMBL; AY355287; AARI8691.1; -.  
 FT NON TER 22  
 FT SEQUENCE 22 AA; 2039 MW; 8F6B89343C822704 CRC64;  
 SQ SEQUENCE 22 AA; 2039 MW; 8F6B89343C822704 CRC64;  
 Query Match 32.5%; Score 25; DB 2; Length 22;  
 Best Local Similarity 66.7%; Pred. No. 4.3e+03;  
 Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 QY 4 RGPGR 9  
 Db 7 RGPGRNS 12  
 RESULT 32  
 Q7M2M8 PRELIMINARY; PRT; 17 AA.  
 ID Q7M2M8  
 AC Q7M2M8;  
 DT 01-MAR-2004 (TReMBLrel. 26, Created)  
 DT 01-MAR-2004 (TReMBLrel. 26, Last sequence update)  
 DT 01-MAR-2004 (TReMBLrel. 26, Last annotation update)  
 DE Dihydrolipoamide S-acyltransferase (EC 2.3.1.12) (Fragment).  
 OS Bos taurus (Bovine).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
 OC Bovinae; Bos.  
 OX NCBI\_TaxID=9913;  
 RN [1]  
 RP SEQUENCE.  
 RX MEDLINE=90354445; PubMed=21673119;  
 RA Rahmatullah M., Radke G.A., Andrews P.C., Roche T.E.;  
 RT "Changes in the core of the mammalian-pyruvate dehydrogenase complex  
 RT upon selective removal of the lipoyl domain from the transacetylase  
 RT component but not from the protein X component.";  
 RL J. Biol. Chem. 265:14512-14517(1990).  
 DR PIR; A37823; A37823.  
 DR GO; GO:0004742; F:dihydrolipoyllysine-residue acetyltransferase. . .; IEA.  
 FT NON TER 1  
 FT NON TER 17  
 FT SEQUENCE 17 AA; 1743 MW; 5BFC5FB662D014D5 CRC64;  
 SQ SEQUENCE 17 AA; 1743 MW; 5BFC5FB662D014D5 CRC64;  
 Query Match 31.8%; Score 24.5; DB 2; Length 17;  
 Best Local Similarity 66.7%; Pred. No. 4.1e+03;  
 Matches 6; Conservative 1; Mismatches 1; Indels 1; Gaps 1;  
 QY 5 GP-GRFVT 12  
 Db 1 GPKGRVFS 9  
 RESULT 33  
 O69173 PRELIMINARY; PRT; 15 AA.  
 ID O69173  
 AC O69173;  
 DT 01-AUG-1998 (TReMBLrel. 07, Created)  
 DT 01-AUG-1998 (TReMBLrel. 07, Last sequence update)  
 DT 01-DEC-2001 (TReMBLrel. 19, Last annotation update)  
 DE Putative ferrocenelactase HemH (Fragment).  
 GN Name=hemH;  
 OS Yersinia pestis.  
 OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;  
 OC Enterobacteriaceae; Yersinia.  
 OX NCBI\_TaxID=632;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RA Munier-Lehmann H.;  
 RL Submitted (MAY-1998) to the EMBL/GenBank/DBJ databases.  
 DR EMBL; AF065382; AAC17437.1; -.  
 FT NON TER 15  
 FT SEQUENCE 15 AA; 1606 MW; C8763FC5C9CCF10B CRC64;  
 SQ SEQUENCE 15 AA; 1606 MW; C8763FC5C9CCF10B CRC64;

Query Match 31.2%; Score 24; DB 2; Length 15;  
Best Local Similarity 38.5%; Pred. No. 4.5e+03;  
Matches 5; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 2 IQRGPGRAFTVIG 14

DB 2 MQSKPGVLWNLG 14

RESULT 34

Q8UHU2 PRELIMINARY; PRT; 19 AA.

AC Q8UHU2 (TREMBlrel. 20, Created)  
DT 01-MAR-2002 (TREMBlrel. 20, Last sequence update)  
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)  
DE TGF-beta4 (Fragment)  
OS Gallus gallus (Chicken)  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Archosauria; Aves; Neognathae; Galliformes; Phasianinae;  
OC Gallus.  
OX NCBI\_TaxID=9031;  
RN [1]  
RP SEQUENCE FROM N.A.

RC TISSUE=Blood;  
RA Li H., Deeb N., Zhou H., Ashwell C.M., Lamont S.J.;  
RL Submitted (DEC-2001) to the EMBL/GenBank/DBJ databases.  
DR EMBL; AF459837; AAL67517.1; -  
DR EMBL; AF459838; AAL67518.1; -  
FT NON\_TER 1  
FT NON\_TER 19  
FT NON\_TER 19  
SQ SEQUENCE 19 AA; 2046 MW; 1250C1CBPE03C2F7 CRC64;

Query Match 31.2%; Score 24; DB 2; Length 19;  
Best Local Similarity 57.1%; Pred. No. 5.6e+03;  
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 3 ORGPGRA 9

DB 4 EMGPGHA 10

RESULT 35

Q8UVE0 PRELIMINARY; PRT; 19 AA.

AC Q8UVE0 (TREMBlrel. 20, Created)  
DT 01-MAR-2002 (TREMBlrel. 20, Last sequence update)  
DT 01-MAR-2002 (TREMBlrel. 20, Last annotation update)  
DE TGF-beta4 (Fragment)  
OS Gallus gallus (Chicken)  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Archosauria; Aves; Neognathae; Galliformes; Phasianinae;  
OC Gallus.  
OX NCBI\_TaxID=9031;  
RN [1]  
RP SEQUENCE FROM N.A.

RC TISSUE=Blood;  
RA Li H., Deeb N., Zhou H., Ashwell C.M., Lamont S.J.;  
RL Submitted (DEC-2001) to the EMBL/GenBank/DBJ databases.  
DR EMBL; AF459839; AAL67519.1; -  
FT NON\_TER 1  
FT NON\_TER 19  
FT NON\_TER 19  
SQ SEQUENCE 19 AA; 2032 MW; 1315C1CBPE03C2F7 CRC64;

Query Match 31.2%; Score 24; DB 2; Length 19;  
Best Local Similarity 57.1%; Pred. No. 5.6e+03;  
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 3 ORGPGRA 9

DB 4 EMGPGHA 10

RESULT 36

Q9R4H4 PRELIMINARY; PRT; 20 AA.

AC Q9R4H4 (TREMBlrel. 13, Created)  
DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)  
DT 01-OCT-2003 (TREMBlrel. 25, Last annotation update)  
DE Sulfite reductase 50 kDa alpha subunit (EC 1.8.99.3) (Fragment).  
OS Desulfovibrio desulfuricans  
OC Bacteria; Proteobacteria; Deltaproteobacteria; Desulfovibrionales;  
OC Desulfovibrionaceae; Desulfovibrio.  
OX NCBI\_TaxID=876;  
RN [1]  
RP SEQUENCE.  
MEDLINE=96085152; PubMed=8521853;  
RA Steuber J., Arendsen A.F., Hagen W.R., Kroneck P.M.;  
RT "Molecular properties of the dissimilatory sulfite reductase from  
Desulfovibrio desulfuricans (Essex) and comparison with the enzyme  
from Desulfovibrio vulgaris (Hildenborough).";  
RL Eur. J. Biochem. 233:873-879 (1995).  
DR PIR: S63490; S63490.  
DR GO: 0018551; F:hydrogensulfite reductase activity; IEA.  
SQ SEQUENCE 20 AA; 2193 MW; F939E03B6E355135 CRC64;

Query Match 31.2%; Score 24; DB 2; Length 20;  
Best Local Similarity 36.4%; Pred. No. 5.9e+03;  
Matches 4; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

QY 1 RIQPGGRAFV 11

DB 10 QLESGPWPSFV 20

RESULT 37

Q9AH71 PRELIMINARY; PRT; 22 AA.

AC Q9AH71 (TREMBlrel. 17, Created)  
DT 01-JUN-2001 (TREMBlrel. 17, Last sequence update)  
DT 01-JUN-2001 (TREMBlrel. 17, Last annotation update)  
DT 01-MAR-2003 (TREMBlrel. 23, Last annotation update)  
DE Hmbr (Fragment).  
GN Name=hmbR;  
OS Neisseria meningitidis.  
OC Bacteria; Proteobacteria; Betaproteobacteria; Neisseriales;  
OC Neisseriaceae; Neisseria.  
OX NCBI\_TaxID=487;  
RN [1]  
RP SEQUENCE FROM N.A.

RC STRAIN=44/76;  
RX DOI=10.1128/IAI.69.3.1687-1696.2001;  
RA Kahler C.M., Blum E., Miller Y.K., Ryan D., Popovic T., Stephens D.S.;  
RT "exl, an exchangeable genetic island in Neisseria meningitidis.";  
RL Infect. Immun. 69:1687-1696 (2001).  
DR EMBL; AF319527; AAK08019.1; -  
FT NON\_TER 1  
FT NON\_TER 1  
SQ SEQUENCE 22 AA; 2584 MW; F1BEC6F2F3C2C49 CRC64;

Query Match 31.2%; Score 24; DB 2; Length 22;  
Best Local Similarity 57.1%; Pred. No. 6.5e+03;  
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 4 RGPGRF 10

DB 8 RAPGRNY 14

RESULT 38

BLP4 BOMOR  
ID BLP4 BOMOR STANDARD; PRT; 25 AA.  
AC P29005;  
DT 01-DEC-1992 (Rel. 24, Created)



DT 01-DEC-1992 (Rel. 24, Last sequence update)  
 DT 05-JUL-2004 (Rel. 44, Last annotation update)  
 DE Bombinin-like peptide 4 (BLP-4).  
 OS Bombina orientalis (Oriental fire-bellied toad).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Amphibia; Batrachia; Anura; Archeobatrachia; Bombinatoridae; Bombina.  
 NCBI\_TaxID=8346;  
 RN [1]  
 RP SEQUENCE.  
 RC TISSUE=Skin secretion;  
 RX MEDLINE=92078177; PubMed=1744108;  
 RA Gibson B.W., Tang D., Mandrell R., Kelly M., Spindel E.R.;  
 RT "Bombinin-like peptides with antimicrobial activity from skin  
 secretions of the Asian toad, Bombina orientalis.";  
 RL J. Biol. Chem. 266:23103-23111(1991).  
 CC - FUNCTION: Has antimicrobial activity, but no hemolytic activity.  
 CC - Preference on killing Gram-negative non-enteric bacteria.  
 CC - SURCELLULAR LOCATION: Secreted.  
 CC - TISSUE SPECIFICITY: Skin.  
 CC - SIMILARITY: Belongs to the bombinin family.  
 DR PIR; D41575; D41575.  
 KW Amidation; Amphibian defense peptide; Antibiotic;  
 KW Direct protein sequencing.  
 FT MOD RES 25 25 Phenylalanine amide.  
 SQ SEQUENCE 25 AA; 2409 MW; E97916634BC3F768 CRC64;  
  
 Query Match 31.2%; Score 24; DB 1; Length 25;  
 Best Local Similarity 45.5%; Pred. No. 7.3e+03;  
 Matches 5; Conservative 2; Mismatches 4; Indels 0; Gaps 0;  
  
 Qy 5 GPGRAFTVIGK 15  
 Db 1 GIGAAILSAGK 11  
  
 RESULT 39  
 Q8JH96 PRELIMINARY; PRT; 16 AA.  
 AC Q8JH96;  
 DT 01-OCT-2002 (TrEMBLrel. 22, Created)  
 DT 01-OCT-2002 (TrEMBLrel. 22, Last sequence update)  
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)  
 DE B-CK (Fragment).  
 OS Anthus spinoletta (Water pipit).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Archosauria; Aves; Neognathae; Passeriformes; Motacillidae; Anthus.  
 NCBI\_TaxID=45802;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RA Bures S., Nadvornik P., Saetre G.-P.;  
 RT "Hybridization and apparent hybridization between meadow pipit (Anthus  
 pratensis) and water pipit (A. spinoletta).";  
 RL Hereditas 136:0-0(2002).  
 DR EMBL; AF527053; AAM93208.1; --  
 DR HSSP; P05122; IQH4.  
 DR GO; GO:0016301; F:kinase activity; IEA.  
 DR GO; GO:0016772; F:transferase activity, transferring phosphor. .; IEA.  
 DR InterPro; IPR000749; ATP-gua\_Ptrans.  
 DR Pfam; PF02807; ATP-gua\_Ptrans; 1.  
 FT NON\_TER 1 1  
 FT NON\_TER 16 16  
 SQ SEQUENCE 16 AA; 1726 MW; 106D0486800C21E7 CRC64;  
  
 Query Match 30.5%; Score 23.5; DB 2; Length 16;  
 Best Local Similarity 46.2%; Pred. No. 5.9e+03;  
 Matches 6; Conservative 1; Mismatches 3; Indels 3; Gaps 1;  
  
 Qy 2 IQRG---PGRAFV 11  
 Db 1 IQTGVNFGHPFI 13  
  
 RESULT 40  
 Q8JH96 PRELIMINARY; PRT; 16 AA.  
 AC Q8JH96;  
 DT 01-OCT-2002 (TrEMBLrel. 22, Created)  
 DT 01-OCT-2002 (TrEMBLrel. 22, Last sequence update)  
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)  
 DE B-CK (Fragment).  
 OS Anthus spinoletta (Water pipit).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Archosauria; Aves; Neognathae; Passeriformes; Motacillidae; Anthus.  
 NCBI\_TaxID=45802;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RA Bures S., Nadvornik P., Saetre G.-P.;  
 RT "Hybridization and apparent hybridization between meadow pipit (Anthus  
 pratensis) and water pipit (A. spinoletta).";  
 RL Hereditas 136:0-0(2002).  
 DR EMBL; AF527053; AAM93208.1; --  
 DR HSSP; P05122; IQH4.  
 DR GO; GO:0016301; F:kinase activity; IEA.  
 DR GO; GO:0016772; F:transferase activity, transferring phosphor. .; IEA.  
 DR InterPro; IPR000749; ATP-gua\_Ptrans.  
 DR Pfam; PF02807; ATP-gua\_Ptrans; 1.  
 FT NON\_TER 1 1  
 FT NON\_TER 16 16  
 SQ SEQUENCE 16 AA; 1726 MW; 106D0486800C21E7 CRC64;  
  
 Query Match 30.5%; Score 23.5; DB 2; Length 16;  
 Best Local Similarity 46.2%; Pred. No. 5.9e+03;  
 Matches 6; Conservative 1; Mismatches 3; Indels 3; Gaps 1;  
  
 Qy 2 IQRG---PGRAFV 11  
 Db 1 IQTGVNFGHPFI 13  
  
 RESULT 41  
 Q9TRK1 PRELIMINARY; PRT; 21 AA.  
 AC Q9TRK1;  
 DT 01-MAY-2000 (TrEMBLrel. 13, Created)  
 DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)  
 DT 25-OCT-2004 (TrEMBLrel. 28, Last annotation update)  
 DE Collagen type IV 24 kDa component (Fragment).  
 OS Canis familiaris (Dog).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.  
 NCBI\_TaxID=9615;  
 RN [1]  
 RP SEQUENCE.  
 RA Thorne P.S., Bauman R., Valli V.E., Mahuran D., Marrano P.M.,  
 RA Jacobs R.;  
 RT "Production of anti-NCI antibody by affected male dogs with X-linked  
 hereditary nephritis: a probe for assessing the NCI domain of collagen  
 type IV in dogs and humans with hereditary nephritis.";  
 RL Submitted (FEB-1993) to the EMBL/GenBank/DBJ databases.  
 SQ SEQUENCE 21 AA; 2300 MW; 08C6D4D9D3D62EEA CRC64;  
  
 Query Match 30.5%; Score 23.5; DB 2; Length 21;  
 Best Local Similarity 66.7%; Pred. No. 7.6e+03;  
 Matches 6; Conservative 2; Mismatches 0; Indels 1; Gaps 1;  
  
 Qy 6 PGRAFTVIG 14  
 Db 3 PGRS-VSIG 10  
  
 RESULT 42  
 COXO RAT STANDARD; PRT; 10 AA.  
 ID COXO RAT  
 AC P80432;  
 DT 01-NOV-1995 (Rel. 32, Created)  
 DT 01-NOV-1995 (Rel. 32, Last sequence update)

Q8JH97 PRELIMINARY; PRT; 16 AA.  
 AC Q8JH97;  
 DT 01-OCT-2002 (TrEMBLrel. 22, Created)  
 DT 01-OCT-2002 (TrEMBLrel. 22, Last sequence update)  
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)  
 DE B-CK (Fragment).  
 OS Anthus pratensis.  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Archosauria; Aves; Neognathae; Passeriformes; Motacillidae; Anthus.  
 NCBI\_TaxID=45803;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RA Bures S., Nadvornik P., Saetre G.-P.;  
 RT "Hybridization and apparent hybridization between meadow pipit (Anthus  
 pratensis) and water pipit (A. spinoletta).";  
 RL Hereditas 136:0-0(2002).  
 DR EMBL; AF527052; AAM93207.1; --  
 DR HSSP; P05122; IQH4.  
 DR GO; GO:0016301; F:kinase activity; IEA.  
 DR GO; GO:0016772; F:transferase activity, transferring phosphor. .; IEA.  
 DR InterPro; IPR000749; ATP-gua\_Ptrans.  
 DR Pfam; PF02807; ATP-gua\_Ptrans; 1.  
 FT NON\_TER 1 1  
 FT NON\_TER 16 16  
 SQ SEQUENCE 16 AA; 1726 MW; 106D0486800C21E7 CRC64;  
  
 Query Match 30.5%; Score 23.5; DB 2; Length 16;  
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 Matches 6; Conservative 1; Mismatches 3; Indels 3; Gaps 1;  
  
 Qy 2 IQRG---PGRAFV 11  
 Db 1 IQTGVNFGHPFI 13  
  
 RESULT 41  
 Q9TRK1 PRELIMINARY; PRT; 21 AA.  
 AC Q9TRK1;  
 DT 01-MAY-2000 (TrEMBLrel. 13, Created)  
 DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)  
 DT 25-OCT-2004 (TrEMBLrel. 28, Last annotation update)  
 DE Collagen type IV 24 kDa component (Fragment).  
 OS Canis familiaris (Dog).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.  
 NCBI\_TaxID=9615;  
 RN [1]  
 RP SEQUENCE.  
 RA Thorne P.S., Bauman R., Valli V.E., Mahuran D., Marrano P.M.,  
 RA Jacobs R.;  
 RT "Production of anti-NCI antibody by affected male dogs with X-linked  
 hereditary nephritis: a probe for assessing the NCI domain of collagen  
 type IV in dogs and humans with hereditary nephritis.";  
 RL Submitted (FEB-1993) to the EMBL/GenBank/DBJ databases.  
 SQ SEQUENCE 21 AA; 2300 MW; 08C6D4D9D3D62EEA CRC64;  
  
 Query Match 30.5%; Score 23.5; DB 2; Length 21;  
 Best Local Similarity 66.7%; Pred. No. 7.6e+03;  
 Matches 6; Conservative 2; Mismatches 0; Indels 1; Gaps 1;  
  
 Qy 6 PGRAFTVIG 14  
 Db 3 PGRS-VSIG 10  
  
 RESULT 42  
 COXO RAT STANDARD; PRT; 10 AA.  
 ID COXO RAT  
 AC P80432;  
 DT 01-NOV-1995 (Rel. 32, Created)  
 DT 01-NOV-1995 (Rel. 32, Last sequence update)

DT 05-JUL-2004 (Rel. 44, Last annotation update)  
DE Cytochrome c oxidase polypeptide VIIC, mitochondrial (EC 1.9.3.1)  
DE (VIIIA) (Fragment).  
GN Name=Cox7c; Synonym=Cox7c1;  
OS Rattus norvegicus (Rat).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.  
OX NCBI\_TaxID=10116;  
RN [1]  
RP SEQUENCE.  
RC STRAIN=Wistar; TISSUE=Heart, and Liver;  
RX MEDLINE=95324529; PubMed=7601105;  
RA Schaeffer H., Noack H., Halangk W., Brandt U., von Jagow G.;  
RT "Cytochrome-c oxidase in developing rat heart. Enzymic properties and  
RT amino-terminal sequences suggest identity of the fetal heart and the  
RT adult liver isoform."  
RL Eur. J. Biochem. 230:235-241(1995).  
CC -!- FUNCTION: This protein is one of the nuclear-coded polypeptide  
CC chains of cytochrome c oxidase, the terminal oxidase in  
CC mitochondrial electron transport.  
CC -!- CATALYTIC ACTIVITY: 4 ferrocytochrome c + O(2) = 4 ferrocytochrome  
CC c + 2 H(2)O.  
CC -!- SIMILARITY: Belongs to the cytochrome c oxidase VIIC family.  
DR PIR; S65388; S65388.  
KW Direct protein sequencing; Inner membrane; Mitochondrion;  
KW Oxidoreductase.  
FT NON\_TER 10 10  
SQ SEQUENCE 10 AA; 1117 MW; 126DE767687B1B0B CRC64;  
  
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DB 4 BEGPKG 9  
  
RESULT 43  
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AC Q7S0C5  
DT 01-MAR-2004 (TrEMBLrel. 26, Created)  
DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)  
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)  
DE Predicted protein.  
GN Name=NCU09984.1;  
OS Neurospora crassa.  
OC Eukaryota; Fungi; Ascomycota; Pezizomycotina; Sordariomycetes;  
OC Sordariomycetidae; Sordariales; Sordariaceae; Neurospora.  
OX NCBI\_TaxID=5141;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC STRAIN=OR74A;  
RA Galagan J.E., Calvo S.E., Borkovich K.A., Selker E.U., Read N.D.,  
RA Jaffe D., Fitzhugh W., Ma L.-J., Smirnov S., Purcell S., Rehman B.,  
RA Elkins D., Engels R., Wang S., Nielsen C.B., Butler J., Endrizzi M.,  
RA Qiki D., Iankiev P., Pedersen D., Nelson M., Washburne M.,  
RA Selitrenikoff C.P., Kinsey J.A., Braun E.L., Zelter A., Schulte U.,  
RA Kothe G.O., Jedd G., Newes W., Staben C., Marcotte E., Greenberg D.,  
RA Roy A., Foley K., Naylor J., Thomann N., Barrett R., Gnerre S.,  
RA Kamal M., Kamysisselis M., Mauceli E., Bielke C., Rudd S., Frishman D.,  
RA Krystofova S., Rasmussen C., Metzenberg R.L., Perkins D.D., Kroken S.,  
RA Cogoni C., Macino G., Catchside D., Li W., Pratt R.J., Omani S.A.,  
RA DeSouza C.C., Glass L., Orbach M.J., Berglund J., Voelker R.,  
RA Yarden O., Flammann M., Seiler S., Dunlap J., Radford A., Aramayo R.,  
RA Natvig D.O., Alex L.A., Mannhaupt G., Eboile D.J., Freitag M.,  
RA Paulsen I., Sachs M.S., Lander E.S., Nusbaum C., Birren B.;  
RT "The Genome Sequence of the Filamentous Fungus Neurospora crassa."  
RL Nature 0:0-0(2003).  
CC -!- CAUTION: The sequence shown here is derived from an  
CC EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is  
CC preliminary data.

DR EMBL; AABX01000510; EAA28761.1; -.  
SQ SEQUENCE 11 AA; 1251 MW; 4BF2534E31B2C9C3 CRC64;  
  
Query Match 29.9%; Score 23; DB 2; Length 11;  
Best Local Similarity 80.0%; Pred. No. 5e+03;  
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
  
QY 10 FVTIG 14  
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DB 5 FVTIG 9  
  
RESULT 44  
Q7PE81 PRELIMINARY; PRT; 14 AA.  
AC Q7PE81  
DT 01-MAR-2004 (TrEMBLrel. 26, Created)  
DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)  
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)  
DE ENSANGP00000024647.  
GN Name=ENSANG00000020916;  
OS Anopheles gambiae str. PEST.  
OC Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;  
OC Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea; Anopheles.  
OX NCBI\_TaxID=180454;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC STRAIN=PEST;  
RA Anopheles Genome Sequencing Consortium;  
RL Submitted (APR-2003) to the EMBL/GenBank/DBJ databases.  
CC -!- CAUTION: The sequence shown here is derived from an  
CC EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is  
CC preliminary data.  
DR EMBL; AAA01004344; EAA45843.1; -.  
SQ SEQUENCE 14 AA; 1652 MW; 4A8A0A1AEC3F7PD3 CRC64;  
  
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Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 6 PGRAFVTIG 14  
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DB 2 PERCFKQIG 10  
  
RESULT 45  
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ID UC19 MAIZE STANDARD; PRT; 15 AA.  
AC P80625;  
DT 01-OCT-1996 (Rel. 34, Created)  
DT 01-OCT-1996 (Rel. 34, Last sequence update)  
DT 05-JUL-2004 (Rel. 44, Last annotation update)  
DE Unknown protein from 2D-PAGE of etiolated coleoptile (Spot 406)  
DE (Fragment).  
OS Zea mays (Maize).  
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
OC Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;  
OC PACCAD clade; Panicoideae; Andropogoneae; Zea.  
OX NCBI\_TaxID=4577;  
RN [1]  
RP SEQUENCE.  
RC TISSUE=Coleoptile;  
RC Toust P., Riccardi F., Morin C., Damerval C., Huet J.-C.,  
RA Pernellet J.-C., Zivy M., de Vienne D.;  
RA "The maize two dimensional gel protein database: towards an integrated  
RT genome analysis program."  
RT Theor. Appl. Genet. 93:997-1005(1996).  
CC -!- MISCELLANEOUS: On the 2D-gel the determined pI of this unknown  
CC protein is: 5.6, its MW is: 18.4 kDa.  
DR Maize-2DPAGE; P80625; COLEOPTILE.  
DR MaizeDB; 123951; -.  
KW Direct protein sequencing.  
FT NON\_TER 1 1

FT NON\_TER 15 15  
SQ SEQUENCE 15 AA; 1672 MW; 1CF69D4DA8737F9D CRC64;  
Query Match 29.9%; Score 23; DB 1; Length 15;  
Best Local Similarity 50.0%; Pred. No. 6.8e+03;  
Matches 4; Conservative 1; Mismatches 3; Indels 0; Gaps 0;  
QY 7 GRAFVTIG 14  
Db ||: ||  
2 GRRYTYG 9

Search completed: May 16, 2005, 13:00:26  
Job time : 88.7692 secs

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GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: May 16, 2005, 14:37:35 ; Search time 41 Seconds  
(without alignments)  
27.311 Million cell updates/sec

Title: US-08-869-386-1

Perfect score: 77.11111111111111  
Sequence: 1 RIQPGGRAFTICK 15

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 218077

Minimum DB seq length: 0

Maximum DB seq length: 25

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 250 summaries

Database :

Issued Patents\_AA.\*

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2: /cgn2\_6/ptodata/1/1aa/5B\_COMB.pep.\*

3: /cgn2\_6/ptodata/1/1aa/6A\_COMB.pep.\*

4: /cgn2\_6/ptodata/1/1aa/6B\_COMB.pep.\*

5: /cgn2\_6/ptodata/1/1aa/PCTUS\_COMB.pep.\*

6: /cgn2\_6/ptodata/1/1aa/backfiles1.pep.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

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| 3          | 77    | 100.0       | 15     | 1  | US-08-709-047-7   |
| 4          | 77    | 100.0       | 15     | 1  | US-08-479-400-2   |
| 5          | 77    | 100.0       | 15     | 1  | US-08-410-360-7   |
| 6          | 77    | 100.0       | 15     | 1  | US-08-095-332-1   |
| 7          | 77    | 100.0       | 15     | 1  | US-08-707-801A-7  |
| 8          | 77    | 100.0       | 15     | 1  | US-08-709-008-7   |
| 9          | 77    | 100.0       | 15     | 1  | US-08-711-175-7   |
| 10         | 77    | 100.0       | 15     | 1  | US-08-488-252-27  |
| 11         | 77    | 100.0       | 15     | 2  | US-08-021-879-2   |
| 12         | 77    | 100.0       | 15     | 2  | US-07-760-530-1   |
| 13         | 77    | 100.0       | 15     | 2  | US-07-950-571A-3  |
| 14         | 77    | 100.0       | 15     | 2  | US-08-978-699-6   |
| 15         | 77    | 100.0       | 15     | 2  | US-08-972-089-6   |
| 16         | 77    | 100.0       | 15     | 2  | US-08-455-625-7   |
| 17         | 77    | 100.0       | 15     | 2  | US-08-395-204-2   |
| 18         | 77    | 100.0       | 15     | 2  | US-08-628-687-1   |
| 19         | 77    | 100.0       | 15     | 2  | US-07-847-311A-1  |
| 20         | 77    | 100.0       | 15     | 2  | US-08-986-234-13  |
| 21         | 77    | 100.0       | 15     | 2  | US-08-986-234-28  |
| 22         | 77    | 100.0       | 15     | 3  | US-08-492-076-22  |
| 23         | 77    | 100.0       | 15     | 3  | US-08-493-071-25  |
| 24         | 77    | 100.0       | 15     | 3  | US-08-480-332-1   |
| 25         | 77    | 100.0       | 15     | 3  | US-08-455-685-7   |
| 26         | 77    | 100.0       | 15     | 3  | US-08-060-988A-7  |
| 27         | 77    | 100.0       | 15     | 3  | US-09-051-006-8   |

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| 39  | 77 | 100.0 | 16 | 3 | US-08-992-877-15   | Sequence 15, Appl |
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| 47  | 77 | 100.0 | 21 | 2 | US-08-452-503A-4   | Sequence 4, Appl  |
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| 50  | 77 | 100.0 | 21 | 2 | US-08-648-298-18   | Sequence 18, Appl |
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| 80  | 77 | 100.0 | 24 | 2 | US-08-462-507A-99  | Sequence 99, Appl |
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| 82  | 77 | 100.0 | 24 | 2 | US-08-467-861A-99  | Sequence 99, Appl |
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| 87  | 77 | 100.0 | 24 | 4 | US-09-790-497A-160 | Sequence 160, App |
| 88  | 77 | 100.0 | 24 | 4 | US-09-576-824A-160 | Sequence 160, App |
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| 100 | 77 | 100.0 | 25 | 3 | US-08-447-515-13   | Sequence 13, Appl |

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| 102 | 77 | 100.0 | 25 | 4 | US-09-593-870A-31 | Sequence 31, Appl | 175 | 68   | 88.3 | 14 | 5 | PCT-US94-05142-10 | Sequence 10, Appl  |
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| 104 | 74 | 96.1  | 15 | 3 | US-08-455-685-12  | Sequence 12, Appl | 177 | 67   | 87.0 | 20 | 1 | US-08-460-602A-51 | Sequence 51, Appl  |
| 105 | 74 | 96.1  | 15 | 3 | US-08-060-988A-12 | Sequence 12, Appl | 178 | 67   | 87.0 | 20 | 1 | US-08-463-966A-51 | Sequence 51, Appl  |
| 106 | 74 | 96.1  | 15 | 5 | PCT-US94-05142-12 | Sequence 12, Appl | 179 | 67   | 87.0 | 20 | 1 | US-08-465-217A-51 | Sequence 51, Appl  |
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| 109 | 73 | 94.8  | 15 | 3 | US-08-455-685-17  | Sequence 17, Appl | 182 | 66   | 85.7 | 25 | 3 | US-08-467-881A-51 | Sequence 14, Appl  |
| 110 | 73 | 94.8  | 15 | 3 | US-08-455-685-23  | Sequence 23, Appl | 183 | 66   | 85.7 | 25 | 3 | US-08-930-917A-14 | Sequence 14, Appl  |
| 111 | 73 | 94.8  | 15 | 3 | US-08-060-988A-17 | Sequence 17, Appl | 184 | 66   | 85.7 | 25 | 2 | US-08-493-235-23  | Sequence 19, Appl  |
| 112 | 73 | 94.8  | 15 | 3 | US-08-060-988A-23 | Sequence 23, Appl | 185 | 64   | 83.1 | 19 | 1 | US-08-498-252-30  | Sequence 19, Appl  |
| 113 | 73 | 94.8  | 15 | 5 | PCT-US94-05142-17 | Sequence 17, Appl | 186 | 63   | 81.8 | 12 | 1 | US-08-488-252-30  | Sequence 30, Appl  |
| 114 | 73 | 94.8  | 15 | 5 | PCT-US94-05142-23 | Sequence 23, Appl | 187 | 63   | 81.8 | 12 | 1 | PCT-US94-02631-52 | Sequence 52, Appl  |
| 115 | 72 | 93.5  | 14 | 2 | US-08-455-685-9   | Sequence 9, Appl  | 188 | 63   | 81.8 | 12 | 5 | PCT-US95-03236-43 | Sequence 43, Appl  |
| 116 | 72 | 93.5  | 14 | 3 | US-08-455-685-9   | Sequence 9, Appl  | 189 | 63   | 81.8 | 12 | 1 | US-08-105-483-384 | Sequence 384, Appl |
| 117 | 72 | 93.5  | 14 | 3 | US-08-060-988A-9  | Sequence 9, Appl  | 190 | 62.5 | 81.2 | 21 | 1 | US-08-709-209-384 | Sequence 384, Appl |
| 118 | 72 | 93.5  | 14 | 5 | PCT-US94-05142-9  | Sequence 9, Appl  | 191 | 62.5 | 81.2 | 21 | 1 | US-08-458-101-384 | Sequence 384, Appl |
| 119 | 72 | 93.5  | 14 | 5 | PCT-US95-03236-29 | Sequence 29, Appl | 192 | 62.5 | 81.2 | 21 | 1 | US-08-657-392-19  | Sequence 19, Appl  |
| 120 | 72 | 93.5  | 14 | 5 | PCT-US95-03236-52 | Sequence 52, Appl | 193 | 62   | 80.5 | 13 | 2 | US-08-657-392-20  | Sequence 20, Appl  |
| 121 | 72 | 93.5  | 15 | 1 | US-08-704-170-72  | Sequence 72, Appl | 194 | 62   | 80.5 | 13 | 2 | US-08-657-392-21  | Sequence 21, Appl  |
| 122 | 72 | 93.5  | 15 | 2 | US-08-455-625-19  | Sequence 19, Appl | 195 | 62   | 80.5 | 13 | 2 | US-08-657-392-22  | Sequence 22, Appl  |
| 123 | 72 | 93.5  | 15 | 2 | US-08-455-625-20  | Sequence 20, Appl | 196 | 62   | 80.5 | 13 | 2 | US-08-657-392-23  | Sequence 23, Appl  |
| 124 | 72 | 93.5  | 15 | 2 | US-08-455-685-21  | Sequence 21, Appl | 197 | 62   | 80.5 | 13 | 5 | PCT-US94-02539-19 | Sequence 19, Appl  |
| 125 | 72 | 93.5  | 15 | 3 | US-08-455-685-19  | Sequence 19, Appl | 198 | 62   | 80.5 | 13 | 5 | PCT-US94-02539-20 | Sequence 20, Appl  |
| 126 | 72 | 93.5  | 15 | 3 | US-08-455-685-21  | Sequence 21, Appl | 199 | 62   | 80.5 | 13 | 5 | PCT-US94-02539-21 | Sequence 21, Appl  |
| 127 | 72 | 93.5  | 15 | 3 | US-08-455-685-21  | Sequence 21, Appl | 200 | 62   | 80.5 | 13 | 5 | PCT-US94-02539-23 | Sequence 23, Appl  |
| 128 | 72 | 93.5  | 15 | 3 | US-08-060-988A-19 | Sequence 19, Appl | 201 | 62   | 80.5 | 13 | 5 | US-08-657-392-24  | Sequence 24, Appl  |
| 129 | 72 | 93.5  | 15 | 3 | US-08-060-988A-20 | Sequence 20, Appl | 202 | 62   | 80.5 | 15 | 5 | PCT-US94-02539-24 | Sequence 24, Appl  |
| 130 | 72 | 93.5  | 15 | 3 | US-08-060-988A-21 | Sequence 21, Appl | 203 | 62   | 80.5 | 20 | 3 | US-08-973-551-24  | Sequence 27, Appl  |
| 131 | 72 | 93.5  | 15 | 5 | PCT-US94-05142-12 | Sequence 12, Appl | 204 | 62   | 80.5 | 23 | 2 | US-08-657-392-27  | Sequence 27, Appl  |
| 132 | 72 | 93.5  | 15 | 5 | PCT-US94-05142-20 | Sequence 20, Appl | 205 | 62   | 80.5 | 23 | 2 | PCT-US94-02539-27 | Sequence 27, Appl  |
| 133 | 72 | 93.5  | 15 | 5 | PCT-US94-05142-21 | Sequence 21, Appl | 206 | 62   | 80.5 | 23 | 5 | US-07-847-311A-20 | Sequence 6, Appl   |
| 134 | 72 | 93.5  | 15 | 5 | PCT-US94-05142-21 | Sequence 21, Appl | 207 | 61   | 79.2 | 14 | 1 | US-08-111-080-6   | Sequence 6, Appl   |
| 135 | 72 | 93.5  | 17 | 1 | US-08-257-528B-35 | Sequence 35, Appl | 208 | 60   | 77.9 | 14 | 1 | US-08-211-980-6   | Sequence 6, Appl   |
| 136 | 72 | 93.5  | 17 | 1 | US-08-460-602A-35 | Sequence 35, Appl | 209 | 60   | 77.9 | 14 | 5 | PCT-US92-07111-6  | Sequence 6, Appl   |
| 137 | 72 | 93.5  | 17 | 1 | US-08-463-966A-35 | Sequence 35, Appl | 210 | 60   | 77.9 | 14 | 5 | PCT-US93-07967-6  | Sequence 6, Appl   |
| 138 | 72 | 93.5  | 17 | 1 | US-08-465-217A-35 | Sequence 35, Appl | 211 | 60   | 77.9 | 14 | 1 | US-08-704-170-74  | Sequence 74, Appl  |
| 139 | 72 | 93.5  | 17 | 2 | US-08-464-329A-35 | Sequence 35, Appl | 212 | 58   | 75.3 | 11 | 1 | US-08-704-170-74  | Sequence 74, Appl  |
| 140 | 72 | 93.5  | 17 | 2 | US-08-462-507A-35 | Sequence 35, Appl | 213 | 58   | 75.3 | 11 | 5 | PCT-US94-02631-73 | Sequence 73, Appl  |
| 141 | 72 | 93.5  | 17 | 2 | US-08-467-881A-35 | Sequence 35, Appl | 214 | 58   | 75.3 | 11 | 5 | PCT-US94-02631-74 | Sequence 74, Appl  |
| 142 | 72 | 93.5  | 17 | 5 | PCT-US92-06688-13 | Sequence 13, Appl | 215 | 58   | 75.3 | 13 | 1 | US-08-090-148-5   | Sequence 5, Appl   |
| 143 | 71 | 92.2  | 15 | 2 | US-08-455-625-13  | Sequence 13, Appl | 216 | 58   | 75.3 | 13 | 1 | US-07-920-281C-10 | Sequence 10, Appl  |
| 144 | 71 | 92.2  | 15 | 2 | US-08-455-625-15  | Sequence 15, Appl | 217 | 58   | 75.3 | 15 | 3 | US-08-466-277-10  | Sequence 10, Appl  |
| 145 | 71 | 92.2  | 15 | 2 | US-08-455-625-15  | Sequence 15, Appl | 218 | 58   | 75.3 | 15 | 4 | US-08-688-842-10  | Sequence 10, Appl  |
| 146 | 71 | 92.2  | 15 | 2 | US-08-455-625-16  | Sequence 16, Appl | 219 | 58   | 75.3 | 15 | 4 | PCT-US92-06688-14 | Sequence 14, Appl  |
| 147 | 71 | 92.2  | 15 | 2 | US-08-455-625-18  | Sequence 18, Appl | 220 | 57   | 74.0 | 11 | 5 | US-08-704-170-70  | Sequence 70, Appl  |
| 148 | 71 | 92.2  | 15 | 2 | US-08-455-625-22  | Sequence 22, Appl | 221 | 57   | 74.0 | 15 | 1 | PCT-US94-02631-70 | Sequence 70, Appl  |
| 149 | 71 | 92.2  | 15 | 3 | US-08-455-685-11  | Sequence 11, Appl | 222 | 57   | 74.0 | 17 | 1 | US-07-920-281C-12 | Sequence 12, Appl  |
| 150 | 71 | 92.2  | 15 | 3 | US-08-455-685-13  | Sequence 13, Appl | 223 | 57   | 74.0 | 17 | 3 | US-08-466-277-12  | Sequence 12, Appl  |
| 151 | 71 | 92.2  | 15 | 3 | US-08-455-685-15  | Sequence 15, Appl | 224 | 57   | 74.0 | 17 | 4 | US-08-257-528B-16 | Sequence 16, Appl  |
| 152 | 71 | 92.2  | 15 | 3 | US-08-455-685-16  | Sequence 16, Appl | 225 | 57   | 74.0 | 21 | 1 | US-08-460-602A-16 | Sequence 16, Appl  |
| 153 | 71 | 92.2  | 15 | 3 | US-08-455-685-18  | Sequence 18, Appl | 226 | 57   | 74.0 | 21 | 1 | US-08-463-966A-16 | Sequence 16, Appl  |
| 154 | 71 | 92.2  | 15 | 3 | US-08-455-685-22  | Sequence 22, Appl | 227 | 57   | 74.0 | 21 | 1 | US-08-465-217A-16 | Sequence 16, Appl  |
| 155 | 71 | 92.2  | 15 | 3 | US-08-060-988A-11 | Sequence 11, Appl | 228 | 57   | 74.0 | 21 | 2 | US-08-464-329A-16 | Sequence 16, Appl  |
| 156 | 71 | 92.2  | 15 | 3 | US-08-060-988A-13 | Sequence 13, Appl | 229 | 57   | 74.0 | 21 | 2 | US-08-462-507A-16 | Sequence 16, Appl  |
| 157 | 71 | 92.2  | 15 | 3 | US-08-060-988A-15 | Sequence 15, Appl | 230 | 57   | 74.0 | 21 | 2 | US-08-467-881A-16 | Sequence 16, Appl  |
| 158 | 71 | 92.2  | 15 | 3 | US-08-060-988A-16 | Sequence 16, Appl | 231 | 57   | 74.0 | 21 | 2 | US-08-704-170-71  | Sequence 71, Appl  |
| 159 | 71 | 92.2  | 15 | 3 | US-08-060-988A-18 | Sequence 18, Appl | 232 | 53   | 68.8 | 10 | 1 | PCT-US94-02631-71 | Sequence 71, Appl  |
| 160 | 71 | 92.2  | 15 | 5 | PCT-US94-05142-11 | Sequence 11, Appl | 233 | 53   | 68.8 | 10 | 5 | US-08-257-528B-36 | Sequence 36, Appl  |
| 161 | 71 | 92.2  | 15 | 5 | PCT-US94-05142-13 | Sequence 13, Appl | 234 | 53   | 68.8 | 14 | 1 | US-08-460-602A-36 | Sequence 36, Appl  |
| 162 | 71 | 92.2  | 15 | 5 | PCT-US94-05142-15 | Sequence 15, Appl | 235 | 53   | 68.8 | 14 | 1 | US-08-463-966A-36 | Sequence 36, Appl  |
| 163 | 71 | 92.2  | 15 | 5 | PCT-US94-05142-16 | Sequence 16, Appl | 236 | 53   | 68.8 | 14 | 1 | US-08-465-217A-36 | Sequence 36, Appl  |
| 164 | 71 | 92.2  | 15 | 5 | PCT-US94-05142-18 | Sequence 18, Appl | 237 | 53   | 68.8 | 14 | 1 | US-08-462-507A-36 | Sequence 36, Appl  |
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| 166 | 71 | 92.2  | 15 | 5 | PCT-US94-05142-22 | Sequence 22, Appl | 239 | 53   | 68.8 | 14 | 2 | US-08-467-881A-36 | Sequence 36, Appl  |
| 167 | 69 | 89.6  | 15 | 2 | US-08-455-625-14  | Sequence 14, Appl | 240 | 53   | 68.8 | 14 | 2 | US-08-218-025A-16 | Sequence 16, Appl  |
| 168 | 69 | 89.6  | 15 | 3 | US-08-455-685-14  | Sequence 14, Appl | 241 | 53   | 68.8 | 15 | 1 | PCT-US92-01103-12 | Sequence 12, Appl  |
| 169 | 69 | 89.6  | 15 | 3 | US-08-060-988A-14 | Sequence 14, Appl | 242 | 53   | 68.8 | 20 | 5 | US-09-820-484-8   | Sequence 8, Appl   |
| 170 | 69 | 89.6  | 15 | 5 | PCT-US94-05142-14 | Sequence 14, Appl | 243 | 52   | 67.5 | 10 | 4 | US-09-430-470-24  | Sequence 24, Appl  |
| 171 | 68 | 88.3  | 13 | 1 | US-08-455-625-10  | Sequence 10, Appl | 244 | 52   | 67.5 | 10 | 4 | US-08-937-276A-5  | Sequence 5, Appl   |
| 172 | 68 | 88.3  | 14 | 2 | US-08-455-685-10  | Sequence 10, Appl | 245 | 52   | 67.5 | 10 | 4 |                   |                    |
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247 52 67.5 10 4 US-09-454-204A-51 Sequence 51, Appl  
248 52 67.5 10 4 US-09-454-204A-68 Sequence 68, Appl  
249 52 67.5 10 4 US-09-508-552-16 Sequence 16, Appl  
250 52 67.5 10 5 PCT-US92-01303-1 Sequence 1, Appl

## ALIGNMENTS

RESULT 1  
US-08-336-087-2  
; Sequence 2, Application US/08336087  
; Patent No. 5503829  
; GENERAL INFORMATION:  
; APPLICANT: Ladant, Daniel  
; APPLICANT: Leclerc, Claude  
; APPLICANT: Sebo, Peter  
; APPLICANT: Ullmann, Agnes  
; TITLE OF INVENTION: Recombinant Mutants for Inducing  
; NUMBER OF SEQUENCES: 7  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &  
; ADDRESSEE: Dunner  
; STREET: 1300 I Street, N.W.  
; CITY: Washington  
; STATE: D.C.  
; COUNTRY: USA  
; ZIP: 20005-3315  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/336,087  
; FILING DATE:  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/011,644  
; FILING DATE: 29-JAN-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Meyers, Kenneth J.  
; REGISTRATION NUMBER: 25,146  
; REFERENCE/DOCKET NUMBER: 03495-0109-01000  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 202-408-4000  
; TELEFAX: 202-408-4400  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-08-336-087-2

Query Match 100.0%; Score 77; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 8.5e-06;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTVIGK 15  
Db 1 RIQPGGRAFTVIGK 15

RESULT 2  
US-08-218-025A-17  
; Sequence 17, Application US/08218025A  
; Patent No. 5556744  
; GENERAL INFORMATION:  
; APPLICANT: Weiner, David B.  
; APPLICANT: Ugen, Kenneth E.  
; APPLICANT: Williams, William V.

; TITLE OF INVENTION: Methods and Compositions for Diagnosing  
; TITLE OF INVENTION: and Treating Certain HIV Infected Patients  
; NUMBER OF SEQUENCES: 197  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Howson and Howson  
; STREET: P.O. Box 457, 321 No. 5556744ristown Road  
; CITY: Spring House  
; STATE: Pennsylvania  
; COUNTRY: U.S.A.  
; ZIP: 19477

; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/218,025A  
; FILING DATE: 24-MAR-1994  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/891,451  
; FILING DATE: 29-MAY-1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Bak, Mary E.  
; REGISTRATION NUMBER: 31,215  
; REFERENCE/DOCKET NUMBER: WST33A  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (215) 540-9206  
; TELEFAX: (215) 540-5818  
; INFORMATION FOR SEQ ID NO: 17:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: unknown  
; MOLECULE TYPE: peptide  
US-08-218-025A-17

Query Match 100.0%; Score 77; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 8.5e-06;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTVIGK 15  
Db 1 RIQPGGRAFTVIGK 15

RESULT 3  
US-08-709-047-7  
; Sequence 7, Application US/08709047  
; Patent No. 5652333  
; GENERAL INFORMATION:  
; APPLICANT: Fung, Michael S.C., Sun, Bill N.C, Sun, Cecily R.Y., Kim, Young M., Yu,  
; APPLICANT: Liming  
; TITLE OF INVENTION: THE GCIq RECEPTOR, HIV-1 gp120 REGION BINDING THEREO,  
; NUMBER OF SEQUENCES: 13  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Tanox Biosystems, Inc.  
; STREET: 10301 Stella Link Rd.  
; CITY: Houston  
; STATE: Texas  
; COUNTRY: USA  
; ZIP: 77025

; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 3.5 inch  
; COMPUTER: IBM PS/2  
; OPERATING SYSTEM: DOS 3.30  
; SOFTWARE: Wordperfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/709,047  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:

Mon May 16 14:51:03 2005

us-08-869-386-1.ra1

APPLICATION NUMBER: US/08/410,360

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Mirabel, Eric P.

REGISTRATION NUMBER: 31,211

REFERENCE/DOCKET NUMBER: TNX95-1

TELECOMMUNICATION INFORMATION:

TELEPHONE: (713) 664-2288

TELEFAX: (713) 664-8914

INFORMATION FOR SEQ ID NO: 7:

SEQUENCE CHARACTERISTICS:

LENGTH: 15 amino acids

TYPE: amino acid

TOPOLOGY: linear

US-08-709-047-7

Query Match

Best Local Similarity 100.0%; Score 77; DB 1; Length 15;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTVIGK 15

Db 1 RIQPGGRAFTVIGK 15

RESULT 4

US-08-479-400-2

; Sequence 2, Application US/08479400

; Patent No. 5679784

; GENERAL INFORMATION:

; APPLICANT: Ladtant, Daniel

; APPLICANT: Leclerc, Claude

; APPLICANT: Sebo, Peter

; APPLICANT: Ullmann, Agnes

; TITLE OF INVENTION: Recombinant Mutants for Inducing

; TITLE OF INVENTION: Specific Immune Responses

; NUMBER OF SEQUENCES: 7

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &

; ADDRESSEE: Dunner

; STREET: 1300 I Street, N.W.

; CITY: Washington

; STATE: D.C.

; COUNTRY: USA

; ZIP: 20005-3315

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent In Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/479,400

; FILING DATE: 07-JUN-1995

; CLASSIFICATION: 424

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/011,644

; FILING DATE: 29-JAN-1993

; ATTORNEY/AGENT INFORMATION:

; NAME: Meyers, Kenneth J.

; REGISTRATION NUMBER: 25,146

; REFERENCE/DOCKET NUMBER: 03495-0109-01000

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 202-408-4000

; TELEFAX: 202-408-4400

; INFORMATION FOR SEQ ID NO: 2:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 15 amino acids

; TYPE: amino acid

; TOPOLOGY: linear

; MOLECULE TYPE: peptide

US-08-479-400-2

Query Match

Best Local Similarity 100.0%; Score 77; DB 1; Length 15;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Best Local Similarity 100.0%; Pred. No. 8.5e-06;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTVIGK 15

Db 1 RIQPGGRAFTVIGK 15

RESULT 5

US-08-410-360-7

; Sequence 7, Application US/08410360

; Patent No. 5691447

; GENERAL INFORMATION:

; APPLICANT: Fung, Michael S.C., Sun, Bill N.C, Sun, Cecily R.Y., Kim, Young W., Yu,

; APPLICANT: Liming

; TITLE OF INVENTION: THE gC1q RECEPTOR, HIV-1 gp120 REGION BINDING THERETO,

; TITLE OF INVENTION: AND RELATED PEPTIDES AND TARGETING ANTIBODIES

; NUMBER OF SEQUENCES: 13

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Tanox Biosystems, Inc.

; STREET: 10301 Stella Link Rd.

; CITY: Houston

; STATE: Texas

; COUNTRY: USA

; ZIP: 77025

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Diskette, 3.5 inch

; COMPUTER: IBM PS/2

; OPERATING SYSTEM: DOS 3.30

; SOFTWARE: Wordperfect 5.1

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/410,360

; FILING DATE:

; CLASSIFICATION: 530

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER:

; FILING DATE:

; ATTORNEY/AGENT INFORMATION:

; NAME: Mirabel, Eric P.

; REGISTRATION NUMBER: 31,211

; REFERENCE/DOCKET NUMBER: TNX95-1

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (713) 664-2288

; TELEFAX: (713) 664-8914

; INFORMATION FOR SEQ ID NO: 7:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 15 amino acids

; TYPE: amino acid

; TOPOLOGY: linear

US-08-410-360-7

Query Match

Best Local Similarity 100.0%; Score 77; DB 1; Length 15;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTVIGK 15

Db 1 RIQPGGRAFTVIGK 15

RESULT 6

US-08-095-332-1

; Sequence 1, Application US/08095332

; Patent No. 5711947

; GENERAL INFORMATION:

; APPLICANT: Berzofsky, Jay A.

; APPLICANT: Takahashi, Hidemi

; APPLICANT: Germain, Ronald N.

; TITLE OF INVENTION: METHOD TO INDUCE CYTOTOXIC T LYMPHOCYTES

; TITLE OF INVENTION: SPECIFIC FOR A BROAD ARRAY OF HIV-1 ISOLATES USING HYBRID

; TITLE OF INVENTION: SYNTHETIC PEPTIDES

; NUMBER OF SEQUENCES: 26

; CORRESPONDENCE ADDRESS:

Query Match

Best Local Similarity 100.0%; Pred. No. 8.5e-06;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;





; TYPE: amino acid  
; TOPOLOGY: linear  
US-08-709-006-7  
  
Query Match 100.0%; Score 77; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 8.5e-06;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 1 RIQPGGRAFTVIGK 15  
| | | | | | | | | | | | | | |  
Db 1 RIQPGGRAFTVIGK 15  
  
RESULT 9  
US-08-711-175-7  
; Sequence 7, Application US/08711175  
; Patent No. 5739306  
; GENERAL INFORMATION:  
; APPLICANT: Fung, Michael S.C., Sun, Bill N.C, Sun, Cecily R.Y.,  
; APPLICANT: Kim, Young W., Yu, Liming  
; TITLE OF INVENTION: THE SC1Q RECEPTOR, HIV-1 gp120 REGION BINDING  
; TITLE OF INVENTION: THERETO, AND RELATED PEPTIDES AND TARGETING  
; TITLE OF INVENTION: ANTIBODIES  
; NUMBER OF SEQUENCES: 13  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Tanox Biosystems, Inc.  
; STREET: 10301 Stella Link Rd.  
; CITY: Houston  
; STATE: Texas  
; COUNTRY: USA  
; ZIP: 77025  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 3.5 inch  
; COMPUTER: IBM PS/2  
; OPERATING SYSTEM: DOS 3.30  
; SOFTWARE: Wordperfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/711,175  
; FILING DATE: 09-SEP-1996  
; CLASSIFICATION: 530  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/410,360  
; FILING DATE: 24-MAR-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Mirabel, Eric P.  
; REGISTRATION NUMBER: 31,211  
; REFERENCE/DOCKET NUMBER: TNX95-1  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (713) 664-2288  
; TELEFAX: (713) 664-8914  
; INFORMATION FOR SEQ ID NO: 7:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
US-08-711-175-7  
  
Query Match 100.0%; Score 77; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 8.5e-06;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 1 RIQPGGRAFTVIGK 15  
| | | | | | | | | | | | | | |  
Db 1 RIQPGGRAFTVIGK 15  
  
RESULT 10  
US-08-488-252-27  
; Sequence 27, Application US/08488252  
; Patent No. 5763160  
; GENERAL INFORMATION:  
; APPLICANT: Chang Yi Wang  
; TITLE OF INVENTION: SYNTHETIC PEPTIDES AND PROCESS

; TITLE OF INVENTION: OF USING SAME FOR THE DETECTION OF ANTIBODIES TO  
; TITLE OF INVENTION: HUMAN IMMUNODEFICIENCY VIRUS (HIV) GP120 ENVELOPE  
; TITLE OF INVENTION: PROTEIN, DIAGNOSIS OF AIDS AND PRE-AIDS CONDITIONS  
; TITLE OF INVENTION: AND AS VACCINES  
; NUMBER OF SEQUENCES: 38  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: MORGAN & FINNEGAN  
; STREET: 345 PARK AVE.  
; CITY: NEW YORK  
; STATE: NEW YORK  
; COUNTRY: USA  
; ZIP: 10154  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: FLOPPY DISK  
; COMPUTER: IBM PC COMPATIBLE  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: WORDPERFECT 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/488,252  
; FILING DATE:  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08\326,676  
; FILING DATE: 07-Jun-1995  
; APPLICATION NUMBER: 07\726,605  
; FILING DATE: 09-July-1991  
; APPLICATION NUMBER: 07\663,262  
; FILING DATE: 01-Mar-1991  
; APPLICATION NUMBER: 07\155,321  
; FILING DATE: 12-Feb-1988  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Maria C. H. Lin  
; REGISTRATION NUMBER: 29,323  
; REFERENCE/DOCKET NUMBER: 1151-4004 USA  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 212-758-4800  
; TELEFAX: (212) 751-6849  
; TELEX: 421792  
; INFORMATION FOR SEQ ID NO: 27:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: Amino acids  
; STRANDEDNESS:  
; TOPOLOGY: Unknown  
US-08-488-252-27  
  
Query Match 100.0%; Score 77; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 8.5e-06;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 1 RIQPGGRAFTVIGK 15  
| | | | | | | | | | | | | | |  
Db 1 RIQPGGRAFTVIGK 15  
  
RESULT 11  
US-08-021-879-2  
; Sequence 2, Application US/08021879  
; Patent No. 5817767  
; GENERAL INFORMATION:  
; APPLICANT: Graham P. Allaway  
; APPLICANT: Paul J. Maddon  
; TITLE OF INVENTION: SYNERGISTIC COMPOSITION OF CD4-BASED  
; TITLE OF INVENTION: PROTEIN AND ANTI-HIV-1 ANTIBODY, AND  
; TITLE OF INVENTION: METHODS OF USING SAME  
; NUMBER OF SEQUENCES: 2  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Cooper & Dunham  
; STREET: 30 Rockefeller Plaza  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10112

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;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.24
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/021,879
; FILING DATE: 24-FEB-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 41189/JPW/AJM
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 664-0525
; TELEFAX: (212) 664-0525
; TELEX: 422523 COOPUI
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
;
US-08-021-879-2

Query Match 100.0%; Score 77; DB 2; Length 15;
Best Local Similarity 100.0%; Pred. No. 8.5e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGCGRAFTVIGK 15
Db 1 RIQPGGCGRAFTVIGK 15

RESULT 12
US-07-760-530-1
; Sequence 1, Application US/07760530
; Patent No. 5820865
; GENERAL INFORMATION:
; APPLICANT: Berzofsky, Jay A.
; APPLICANT: Takahashi, Hidemi
; APPLICANT: Germain, Ronald N.
; TITLE OF INVENTION: METHOD TO INDUCE CYTOTOXIC T LYMPHOCYTES
; TITLE OF INVENTION: SPECIFIC FOR A BROAD ARRAY OF HIV-1 ISOLATES USING HYBRID
; TITLE OF INVENTION: SYNTHETIC PEPTIDES
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolash & Birch
; STREET: 301 N. Washington
; CITY: Falls Church
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22046-0747
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/760,530
; FILING DATE: 19910918
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: Svensson, Leonard R.
; REGISTRATION NUMBER: 30,330
; REFERENCE/DOCKET NUMBER: 1173-354P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-241-1300
; TELEFAX: 703-241-2848
; TELEX: 248345
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
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;
; TYPE: AMINO ACID
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
; ORGANISM: HIV-1
; INDIVIDUAL ISOLATE: IIB
; FEATURE:
; NAME/KEY: Peptide
; LOCATION: 1..15
; OTHER INFORMATION: /label= peptide
; OTHER INFORMATION: /note= "synthetic peptide, sequence = residues 315
; OTHER INFORMATION: to 329 of HIV-1, isolate IIB, gp160 envelope
; OTHER INFORMATION: glycoprotein."
;
US-07-760-530-1

Query Match 100.0%; Score 77; DB 2; Length 15;
Best Local Similarity 100.0%; Pred. No. 8.5e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGCGRAFTVIGK 15
Db 1 RIQPGGCGRAFTVIGK 15

RESULT 13
US-07-950-571A-3
; Sequence 3, Application US/07950571A
; Patent No. 5854400
; GENERAL INFORMATION:
; APPLICANT: Chang, Tse Wen, Fung, Michael S.C., Sun, Bill N.C., Sun, Cecily R.Y.,
; APPLICANT: Chang, Nancy T.
; TITLE OF INVENTION: Monoclonal Antibodies which Neutralize HIV-1 Infection
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Tanox Biosystems, Inc.
; STREET: 10301 Stella Link Rd.
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Hi Density Diskette
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: DOS, Version 3.30
; SOFTWARE: Wordperfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/950,571A
; FILING DATE: 19920922
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: No. 5854400 07/767,533
; FILING DATE: 09/26/1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Mirabel, Eric P.
; REGISTRATION NUMBER: 31,211
; REFERENCE/DOCKET NUMBER: TNX87-11BBC
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 713-664-2288
; TELEFAX: 713-664-8914
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: AMINO ACID
; TOPOLOGY: Linear
;
US-07-950-571A-3

Query Match 100.0%; Score 77; DB 2; Length 15;
Best Local Similarity 100.0%; Pred. No. 8.5e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGCGRAFTVIGK 15
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Db 1 RIORGPGRAFTVIGK 15

RESULT 14  
US-08-975-699-6  
; Sequence 6, Application US/08975699  
; Patent No. 5858369  
; GENERAL INFORMATION:  
; APPLICANT: MATSUO, KAZUHIRO  
; APPLICANT: CHUJO, YOSHITOMO  
; APPLICANT: YAMAZAKI, AKIHIRO  
; APPLICANT: HONDA, MITSUO  
; APPLICANT: TASAKA, HIROMICHI  
; APPLICANT: YAMAKAZI, SHUDO  
; TITLE OF INVENTION: ANTI-AIDS SECRETORY RECOMBINANT BCG  
; TITLE OF INVENTION: VACCINE  
; NUMBER OF SEQUENCES: 27  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,  
; STREET: 1755 S. JEFFERSON DAVIS HIGHWAY, SUITE 400  
; CITY: ARLINGTON  
; STATE: VA  
; COUNTRY: USA  
; ZIP: 22202  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/975,699  
; FILING DATE:  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/619,512  
; FILING DATE: 29-MAR-1996  
; APPLICATION NUMBER: PCT/JP95/01515  
; FILING DATE: 31-JUL-1995  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: JP 178462/1994  
; FILING DATE: 29-JUL-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: OBLON, NORMAN F.  
; REGISTRATION NUMBER: 24,618  
; REFERENCE/DOCKET NUMBER: 10-795-0X PCT  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-413-3000  
; TELEFAX: 703-413-2220  
; INFORMATION FOR SEQ ID NO: 6:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; ORIGINAL SOURCE:  
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS  
; STRAIN: HIV-1 (JAPAN)  
US-08-975-699-6

Query Match 100.0%; Score 77; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 8.5e-06;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIORGPGRAFTVIGK 15  
Db 1 RIORGPGRAFTVIGK 15

RESULT 15  
US-08-972-089-6  
; Sequence 6, Application US/08972089

; Patent No. 5885580  
; GENERAL INFORMATION:  
; APPLICANT: MATSUO, KAZUHIRO  
; APPLICANT: CHUJO, YOSHITOMO  
; APPLICANT: YAMAZAKI, AKIHIRO  
; APPLICANT: HONDA, MITSUO  
; APPLICANT: TASAKA, HIROMICHI  
; APPLICANT: YAMAKAZI, SHUDO  
; TITLE OF INVENTION: ANTI-AIDS SECRETORY RECOMBINANT BCG  
; TITLE OF INVENTION: VACCINE  
; NUMBER OF SEQUENCES: 27  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,  
; STREET: 1755 S. JEFFERSON DAVIS HIGHWAY, SUITE 400  
; CITY: ARLINGTON  
; STATE: VA  
; COUNTRY: USA  
; ZIP: 22202  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/972,089  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/975,699  
; FILING DATE:  
; APPLICATION NUMBER: PCT/JP95/01515  
; FILING DATE: 31-JUL-1995  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: JP 178462/1994  
; FILING DATE: 29-JUL-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: OBLON, NORMAN F.  
; REGISTRATION NUMBER: 24,618  
; REFERENCE/DOCKET NUMBER: 10-795-0X PCT  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-413-3000  
; TELEFAX: 703-413-2220  
; INFORMATION FOR SEQ ID NO: 6:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; ORIGINAL SOURCE:  
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS  
; STRAIN: HIV-1 (JAPAN)  
US-08-972-089-6

Query Match 100.0%; Score 77; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 8.5e-06;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIORGPGRAFTVIGK 15  
Db 1 RIORGPGRAFTVIGK 15

RESULT 16  
US-08-455-625-7  
; Sequence 7, Application US/08455625  
; Patent No. 5932218  
; GENERAL INFORMATION:  
; APPLICANT: Berzofsky, Jay A.  
; APPLICANT: Ahlers, Jeffrey D.  
; APPLICANT: Pendleton, C. D.  
; APPLICANT: Nara, Peter

```
; APPLICANT: Shirai, Mutunori
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T
; TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolasch & Birch
; STREET: P.O. Box 747
; CITY: Falls Church
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22040-0747
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,625
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/060,988
; FILING DATE: 14-MAY-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Svensson, Leonard R.
; REGISTRATION NUMBER: 30330
; REFERENCE/DOCKET NUMBER: 1173-434P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-205-8000
; TELEFAX: 703-205-8050
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: internal
; FEATURE:
; NAME/KEY: Peptide
; LOCATION: 1..15
; OTHER INFORMATION: /label= peptide
; OTHER INFORMATION: /note= "p1811B peptide, see Table V"
US-08-455-625-7

Query Match 100.0%; Score 77; DB 2; Length 15;
Best Local Similarity 100.0%; Pred. No. 8.5e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGGPGRFVTIGK 15
| | | | | | | | | | | | | | |
Db 1 RIQGGPGRFVTIGK 15

RESULT 17
US-08-395-204-2
; Sequence 2, Application US/08395204
; Patent No. 5915580
; GENERAL INFORMATION:
; APPLICANT: Ladtant, Daniel
; APPLICANT: Leclerc, Claude
; APPLICANT: Sebo, Peter
; APPLICANT: Ullmann, Agnes
; TITLE OF INVENTION: Recombinant Mutants for Inducing
; TITLE OF INVENTION: Specific Immune Responses
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
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; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/395,204
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/871,795
; FILING DATE: 21-APR-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 03495-0109-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-408-4000
; TELEFAX: 202-408-4400
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; MISC:
US-08-395-204-2

Query Match 100.0%; Score 77; DB 2; Length 15;
Best Local Similarity 100.0%; Pred. No. 8.5e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGGPGRFVTIGK 15
| | | | | | | | | | | | | | |
Db 1 RIQGGPGRFVTIGK 15

RESULT 18
US-08-628-687-1
; Sequence 1, Application US/08628687
; Patent No. 5939277
; GENERAL INFORMATION:
; APPLICANT: Rakowicz-Szulczynska, Eva M.
; TITLE OF INVENTION: DETECTION AND TREATMENT OF BREAST AND
; TITLE OF INVENTION: GYNECOLOGICAL CANCER
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FISH & NEAVE
; STREET: 1251 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10020
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/628,687
; FILING DATE: 14-JUN-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/138,141
; FILING DATE: 15-OCT-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Haley Jr., James F.
; REGISTRATION NUMBER: 27,794
; REFERENCE/DOCKET NUMBER: APPOLLO/1CIP1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-596-9000
; TELEFAX: 212-596-9090
; INFORMATION FOR SEQ ID NO: 1:
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/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 15 amino acids
/ TYPE: amino acid
/ STRANDEDNESS:
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
/ HYPOTHETICAL: NO
/ ANTI-SENSE: NO
/ FRAGMENT TYPE: internal
/ US-08-628-687-1

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Query Match      100.0%; Score 77; DB 2; Length 15;
Best Local Similarity 100.0%; Pred. No. 8.5e-06;
Matches 15; Conservative 0; Mismatches 0; Indels
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RESULT 19  
US-07-847-311A-1

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, OTHER INFORMATION: peptide of HIV-1 envelope glycoprotein from strain
, OTHER INFORMATION: IIIB; activatable by protease cleavage to core
, FEATURE:
, NAME/KEY: Peptide
, LOCATION: 4..13
, OTHER INFORMATION: /label= peptide
, OTHER INFORMATION: /note= "Highly immunogenic core peptide from
, OTHER INFORMATION: immunodominant region of envelope glycoprotein of
, OTHER INFORMATION: HIV-1 strain IIIB; peptide p18-I-10"
, FEATURE:
, NAME/KEY: Peptide
, LOCATION: 5..13
, OTHER INFORMATION: /label= peptide
, OTHER INFORMATION: /note= "peptide p18-I-9"
, FEATURE:
, NAME/KEY: Peptide
, LOCATION: 4..12
, OTHER INFORMATION: /label= peptide
, OTHER INFORMATION: /note= "peptide p18-T-9"
, FEATURE:
, NAME/KEY: Peptide
, LOCATION: 3..11
, OTHER INFORMATION: /label= peptide
, OTHER INFORMATION: /note= "peptide p18-V-9"
, FEATURE:
, NAME/KEY: Peptide
, LOCATION: 2..11
, OTHER INFORMATION: /label= peptide
, OTHER INFORMATION: /note= "peptide p18-V-10"
, US-07-847-311A-1

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```

RESULT 20
US-08-986-234-13
; Sequence 13, Application US/08986234
; Patent NO. 5981706
; GENERAL INFORMATION:
; APPLICANT: Wallen, et al.
; TITLE OF INVENTION: Methods for Synthesizing Heat Shock Protein Complexes
; FILE REFERENCE: UNME-0008-1
; CURRENT APPLICATION NUMBER: US/08/986,234
; CURRENT FILING DATE: 1997-12-05
; NUMBER OF SEQ ID NOS: 114
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 13
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human immunodeficiency virus
US-08-986-234-13

```

RESULT 21  
US-08-986-234-28  
; Sequence 28, Application US/08986234  
; Patent No. 5981706  
; GENERAL INFORMATION:  
; APPLICANT: Wallen, et al.

; TITLE OF INVENTION: Methods for Synthesizing Heat Shock Protein Complexes

; FILE REFERENCE: UNNE-0008-1  
; CURRENT APPLICATION NUMBER: US/08/986,234  
; CURRENT FILING DATE: 1997-12-05  
; NUMBER OF SEQ ID NOS: 114  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 28  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: Human immunodeficiency virus  
US-08-986-234-28

Query Match 100.0%; Score 77; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 8.5e-06;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTVIGK 15  
| | | | | | | | | | | | | | |  
Db 1 RIQPGGRAFTVIGK 15

RESULT 22

US-08-492-076-22

; Sequence 22, Application US/08492076A  
; Patent No. 6060064  
; GENERAL INFORMATION:  
; APPLICANT: Adams, Sally E.  
; APPLICANT: Burus, Nigel R.  
; APPLICANT: Richardson, Simon M.  
; TITLE OF INVENTION: No. 6060064el Proteinaceous Particles  
; FILE REFERENCE: 10180.60968  
; CURRENT APPLICATION NUMBER: US/08/492,076A  
; CURRENT FILING DATE: 1995-06-28  
; EARLIER APPLICATION NUMBER: PCT/GB93/02656  
; EARLIER FILING DATE: 1993-12-24  
; NUMBER OF SEQ ID NOS: 23  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 22  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: Human immunodeficiency virus type 1  
US-08-492-076-22

Query Match 100.0%; Score 77; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 8.5e-06;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTVIGK 15  
| | | | | | | | | | | | | | |  
Db 1 RIQPGGRAFTVIGK 15

RESULT 23

US-08-493-071-25

; Sequence 25, Application US/08493071  
; Patent No. 6127149  
; GENERAL INFORMATION:  
; APPLICANT: Hirai, Yohei  
; APPLICANT: Koshida, Shogo  
; APPLICANT: Oka, Yumiko  
; TITLE OF INVENTION: MODIFIED EPIMORPHIN  
; NUMBER OF SEQUENCES: 30  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: LOWE, PRICE, LEBLANC & BECKER  
; STREET: 99 CANAL CENTER PLAZA, SUITE 300  
; CITY: ALEXANDRIA  
; STATE: VA  
; COUNTRY: USA  
; ZIP: 22314  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/493,071  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Price, Robert L.  
; REGISTRATION NUMBER: 22,685  
; REFERENCE/DOCKET NUMBER: 715-107  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-684-1111  
; TELEFAX: 703-684-1124

; INFORMATION FOR SEQ ID NO: 25:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-08-493-071-25

Query Match 100.0%; Score 77; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 8.5e-06;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTVIGK 15  
| | | | | | | | | | | | | | |  
Db 1 RIQPGGRAFTVIGK 15

RESULT 24

US-08-480-332-1

; Sequence 1, Application US/08480332  
; Patent No. 6180134  
; GENERAL INFORMATION:  
; APPLICANT: Zalipsky, Samuel; Woodle, Martin; Francis;  
; APPLICANT: Barenholz, Yechezkel  
; TITLE OF INVENTION: Enhanced Circulation Effector Composition and  
; TITLE OF INVENTION: Method  
; NUMBER OF SEQUENCES: 10  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Dehlinger & Associates  
; STREET: 350 Cambridge Avenue, Suite 250  
; CITY: Palo Alto  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94306

; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/480,332  
; FILING DATE: 7-JUN-1995  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/316,436  
; FILING DATE: 29-SEP-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/035,443  
; FILING DATE: 23-MAR-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Mohr, Judy M.  
; REGISTRATION NUMBER: 38,563  
; REFERENCE/DOCKET NUMBER: 5325-0115.31  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 324-0880  
; TELEFAX: (415) 324-0960  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid

STRANDEDNESS: unknown  
TOPOLOGY: unknown  
MOLECULE TYPE: peptide  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
INDIVIDUAL ISOLATE: Peptide 1, Fig. 13  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 1..15  
US-08-480-332-1

Query Match 100.0%; Score 77; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 8.5e-06;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGFAFVTIGK 15  
Db 1 RIQPGGFAFVTIGK 15

RESULT 25  
US-08-455-685-7  
; Sequence 7, Application US/08455685  
; Patent No. 6214347  
; GENERAL INFORMATION:  
; APPLICANT: Berzofsky, Jay A.  
; APPLICANT: Ahlers, Jeffrey D.  
; APPLICANT: Pendleton, C. David  
; APPLICANT: Nara, Peter  
; APPLICANT: Shirai, Mutsunori  
; TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT  
; TITLE OF INVENTION: HELPER T-LYMPHOCYTE AND  
; TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
; NUMBER OF SEQUENCES: 40  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Fish & Richardson P.C.  
; STREET: 225 Franklin Street  
; CITY: Boston  
; STATE: MA  
; COUNTRY: US  
; ZIP: 02110-2804  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: Windows95  
; SOFTWARE: FastSeq for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/455,685  
; FILING DATE: 31-MAY-1995  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/060,988  
; FILING DATE: 14-MAY-1993

; APPLICATION NUMBER: 07/847,311  
; FILING DATE: 06-MAR-1992  
; APPLICATION NUMBER: 07/751,998  
; FILING DATE: 29-AUG-1991  
; APPLICATION NUMBER: 07/148,692  
; FILING DATE: 26-JAN-1988  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Beattie, Ingrid A.  
; REGISTRATION NUMBER: P-42,306  
; REFERENCE/DOCKET NUMBER: 08830/022003  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617/542-5070  
; TELEFAX: 617/542-8906  
; TELEX: 200154  
; INFORMATION FOR SEQ ID NO: 7:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide

US-08-455-685-7

Query Match 100.0%; Score 77; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 8.5e-06;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGFAFVTIGK 15  
Db 1 RIQPGGFAFVTIGK 15

RESULT 26  
US-08-060-988A-7  
; Sequence 7, Application US/08060988A  
; Patent No. 6294322  
; GENERAL INFORMATION:  
; APPLICANT: Berzofsky, Jay A.  
; APPLICANT: Ahlers, Jeffrey D.  
; APPLICANT: Pendleton, C. David  
; APPLICANT: Nara, Peter  
; APPLICANT: Shirai, Mutsunori  
; TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES  
; TITLE OF INVENTION: THAT ELICIT  
; TITLE OF INVENTION: HELPER T-LYMPHOCYTE AND  
; TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
; NUMBER OF SEQUENCES: 48  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Fish & Richardson P.C.  
; STREET: 225 Franklin Street  
; CITY: Boston  
; STATE: MA  
; COUNTRY: US  
; ZIP: 02110-2804  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: Windows95  
; SOFTWARE: FastSeq for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/060,988A  
; FILING DATE: 14-MAY-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 07/847,311  
; FILING DATE: 06-MAR-1992  
; APPLICATION NUMBER: 07/751,998  
; FILING DATE: 29-AUG-1991  
; APPLICATION NUMBER: 07/148,692  
; FILING DATE: 26-JAN-1988  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Beattie, Ingrid A.  
; REGISTRATION NUMBER: P-42,306  
; REFERENCE/DOCKET NUMBER: 08830/022001  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617/542-5070  
; TELEFAX: 617/542-8906  
; TELEX: 200154  
; INFORMATION FOR SEQ ID NO: 7:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; US-08-060-988A-7

Query Match 100.0%; Score 77; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 8.5e-06;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGFAFVTIGK 15  
Db 1 RIQPGGFAFVTIGK 15



## RESULT 27

US-09-051-006-8  
; Sequence 8, Application US/09051006  
; Patent No. 6380359  
; GENERAL INFORMATION:  
; APPLICANT: Mogam Biotechnology Research Institute  
; APPLICANT: Kim, Tae-Young  
; APPLICANT: Lee, Ki-Young  
; APPLICANT: Chang, Jin-Soo  
; APPLICANT: Cho, Sung-Yoo  
; APPLICANT: Hwang, Yu-Kyeong  
; APPLICANT: Choi, Myeong  
; APPLICANT: Cheong, Hong-Seok

; TITLE OF INVENTION: Liposomes Comprising Peptide Antigens  
; TITLE OF INVENTION: Derived from X Protein of Hepatitis B virus

; FILE REFERENCE: 0136/0E154

; CURRENT APPLICATION NUMBER: US/09/051,006

; CURRENT FILING DATE: 1998-03-30

; NUMBER OF SEQ ID NOS: 10

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 8

; LENGTH: 15

; TYPE: PRT

; ORGANISM: HIV

US-09-051-006-8

Query Match

Best Local Similarity 100.0%; Score 77; DB 3; Length 15;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRGFAVTVIGK 15

DB 1 RIQGPGRGFAVTVIGK 15

## RESULT 28

US-09-389-390-1

; Sequence 1, Application US/09389390

; Patent No. 6558961

; GENERAL INFORMATION:

; APPLICANT: SARPHIE

; TITLE OF INVENTION: IMMUNODIAGNOSTICS USING PARTICLE DELIVERY METHODS

; FILE REFERENCE: OPF1620

; CURRENT APPLICATION NUMBER: US/09/389,390

; CURRENT FILING DATE: 1999-09-03

; PRIOR APPLICATION NUMBER: 60/099,261

; PRIOR FILING DATE: 1998-09-04

; PRIOR APPLICATION NUMBER: 60/139,045

; PRIOR FILING DATE: 1999-06-10

; NUMBER OF SEQ ID NOS: 10

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 1

; LENGTH: 15

; TYPE: PRT

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Description of Artificial Sequence:synthetic

; OTHER INFORMATION: construct

US-09-389-390-1

Query Match

Best Local Similarity 100.0%; Score 77; DB 4; Length 15;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRGFAVTVIGK 15

DB 1 RIQGPGRGFAVTVIGK 15

## RESULT 29

US-09-508-552-15

; Sequence 15, Application US/09508552

; Patent No. 6749856

## ; GENERAL INFORMATION:

; APPLICANT: Berzofsky, Jay A.

; APPLICANT: Belyakov, Igor M.

; APPLICANT: Derby, Michael A.

; APPLICANT: Kelleall, Brian L.

; APPLICANT: Strober, Warren

; APPLICANT: THE GOVERNMENT OF THE UNITED STATES OF AMERICA, as

; TITLE OF INVENTION: MUCOSAL CYTOTOXIC T LYMPHOCYTE RESPONSES

; FILE REFERENCE: 368200PCSEQ

; CURRENT APPLICATION NUMBER: US/09/508,552

; CURRENT FILING DATE: 2000-06-12

; PRIOR FILING DATE: 1997-09-11

; PRIOR APPLICATION NUMBER: 60/074,894

; PRIOR FILING DATE: 1998-02-17

; NUMBER OF SEQ ID NOS: 20

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 15

; LENGTH: 15

; TYPE: PRT

; ORGANISM: Human immunodeficiency virus type 1

US-09-508-552-15

Query Match

Best Local Similarity 100.0%; Score 77; DB 4; Length 15;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRGFAVTVIGK 15

DB 1 RIQGPGRGFAVTVIGK 15

## RESULT 30

US-09-827-688-9

; Sequence 9, Application US/09827688

; Patent No. 6821555

; GENERAL INFORMATION:

; APPLICANT: ORSON, FRANK

; APPLICANT: KINSEY, BERMA

; APPLICANT: BHOGAL, BALBIR

; TITLE OF INVENTION: MACROAGGREGATED PROTEIN CONJUGATES AS ORAL GENETIC IMMUNIZATION DI

; FILE REFERENCE: P01949US1/10004014

; CURRENT APPLICATION NUMBER: US/09/827,688

; CURRENT FILING DATE: 2001-04-06

; PRIOR APPLICATION NUMBER: 60/195,680

; PRIOR FILING DATE: 2000-04-07

; NUMBER OF SEQ ID NOS: 13

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 9

; LENGTH: 15

; TYPE: PRT

; ORGANISM: HIV p18

US-09-827-688-9

Query Match

Best Local Similarity 100.0%; Score 77; DB 4; Length 15;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRGFAVTVIGK 15

DB 1 RIQGPGRGFAVTVIGK 15

## RESULT 31

PCT-US92-10378-1

; Sequence 1, Application PC/TUS9210378

; GENERAL INFORMATION:

; APPLICANT: BOARD OF REGENTS, THE UNIVERSITY OF

; APPLICANT: TEXAS SYSTEM

; APPLICANT: SASTRY, Jagannadha K.

; APPLICANT: ARLINGHAUS, Ralph B.

; APPLICANT: PLATSOUKAS, Chris D.



```
; ATTORNEY/AGENT INFORMATION:
; NAME: Wong, Wean Khing
; REGISTRATION NUMBER: 33,561
; REFERENCE/DOCKET NUMBER: 5324.US.P1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (708) 938-3517
; TELEFAX: (708) 938-2623
; TELEX:
; INFORMATION FOR SEQ ID NO: 28:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 amino acid residues
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: unknown
; MOLECULE TYPE: peptide
; ORIGINAL SOURCE:
; ORGANISM:
; US-08-657-392-28

Query Match 100.0%; Score 77; DB 2; Length 16;
Best Local Similarity 100.0%; Pred. No. 9.1e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGPGRGFAVTIGK 15
Db 2 RIQGPGRGFAVTIGK 16

RESULT 34
US-08-251-472-2
; Sequence 2, Application US/08251472
; Patent No. 5871746
; GENERAL INFORMATION:
; APPLICANT: BOUTILLON, CHRISTOPHE; MARTINON,
; APPLICANT: FREDERIC; GRAS-MASSE, HELENE;
; APPLICANT: COMARD, ELISABETH; SERGHERAERT,
; APPLICANT: CHRISTIAN; MAGNE, REMY; TARTAR,
; APPLICANT: ANDRE; LEVY, JEAN-PAUL
; TITLE OF INVENTION: CYTOTOXIC T LYMPHOCYTE
; TITLE OF INVENTION: -INDUCING LIPOPEPTIDES AND USE AS VACCINES
; NUMBER OF SEQUENCES: 11
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BIERMAN & MUSERLIAN
; STREET: 600 THIRD AVENUE
; CITY: NEW YORK
; STATE: NEW YORK
; COUNTRY: USA
; ZIP: 10016
; COMPUTER READABLE FORM:
; MEDIUM TYPE: FLOPPY DISK
; COMPUTER: IBM PC COMPATIBLE
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/251.472
; FILING DATE: 31-MAY-1994
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: MUSERLIAN, CHARLES A
; REGISTRATION NUMBER: 19,683
; REFERENCE/DOCKET NUMBER: 102.1511
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 661-8000
; TELEFAX: (212) 661-8002
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:

; ORGANISM: HIV-1
; FEATURE:
; LOCATION: ENV 312-327
; US-08-251-472-2

Query Match 100.0%; Score 77; DB 2; Length 16;
Best Local Similarity 100.0%; Pred. No. 9.1e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGPGRGFAVTIGK 15
Db 2 RIQGPGRGFAVTIGK 16

RESULT 35
US-08-484-905-35
; Sequence 35, Application US/08484905
; Patent No. 5976551
; GENERAL INFORMATION:
; APPLICANT: Mottez, Estelle
; APPLICANT: Abastado, Jean-Pierre
; APPLICANT: Kourilsky, Philippe
; TITLE OF INVENTION: An Altered Major Histocompatibility
; TITLE OF INVENTION: Complex(MHC) Determinant and Methods for Using the
; TITLE OF INVENTION: Determinant
; NUMBER OF SEQUENCES: 127
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W., Suite 700
; CITY: Washington
; STATE: D.C.
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy Disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS-/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/484,905
; FILING DATE: 07-JUNE-1995
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; PRIOR APPLICATION NUMBER: US 07/801,818
; FILING DATE: 15-NOV-1991
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Potter, Jane E. R.
; REGISTRATION NUMBER: 33,332
; REFERENCE/DOCKET NUMBER: 03495.0106-03000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-408-4000
; TELEFAX: 202-408-4400
; INFORMATION FOR SEQ ID NO: 35:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-484-905-35

Query Match 100.0%; Score 77; DB 2; Length 16;
Best Local Similarity 100.0%; Pred. No. 9.1e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGPGRGFAVTIGK 15
Db 2 RIQGPGRGFAVTIGK 16
```

```
RESULT 36
US-08-481-985B-35
; Sequence 35, Application US/08481985B
; Patent No. 6011146
; GENERAL INFORMATION:
; APPLICANT: Mottez, Estelle
; APPLICANT: Abastado, Jean-Pierre
; APPLICANT: Kourilsky, Philippe
; TITLE OF INVENTION: Altered Major Histocompatibility Complex
; TITLE OF INVENTION:
; NUMBER OF SEQUENCES: 148
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W., Suite 700
; CITY: Washington
; STATE: D.C.
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/481,985B
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/801,818
; FILING DATE: 05-DEC-1991
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/792,473
; FILING DATE: 15-NOV-1991
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 03495.0106-04000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-408-4000
; TELEFAX: 202-408-4400
; INFORMATION FOR SEQ ID NO: 35:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-481-985B-35

Query Match 100.0%; Score 77; DB 3; Length 16;
Best Local Similarity 100.0%; Pred. No. 9.1e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15
Db 2 RIQRGPGRAFTVIGK 16
|||||

RESULT 37
US-09-248-082-2
; Sequence 2, Application US/09248082
; Patent No. 6015564
; GENERAL INFORMATION:
; APPLICANT: BOUTILLON, CHRISTOPHE; MARTINON,
; APPLICANT: FREDERIC; GRAS-MASSE, HELENE;
; APPLICANT: GOMARD, ELISABETH; SERGHERAERT,
; APPLICANT: CHRISTIAN; MAGNE, REMY; TARTAR,
; APPLICANT: ANDRE; LEVY, JEAN-PAUL
; TITLE OF INVENTION: CYTOTOXIC T LYMPHOCYTE
; TITLE OF INVENTION: -INDUCING LIPOPEPTIDES AND USE AS VACCINES
; NUMBER OF SEQUENCES: 11
```

```
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BIERMAN & MUSERLIAN
; STREET: 600 THIRD AVENUE
; CITY: NEW YORK
; STATE: NEW YORK
; COUNTRY: USA
; ZIP: 10016
; COMPUTER READABLE FORM:
; MEDIUM TYPE: FLOPPY DISK
; COMPUTER: IBM PC COMPATIBLE
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/248,082
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/251,472
; FILING DATE: 31-MAY-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: MUSERLIAN, CHARLES A
; REGISTRATION NUMBER: 19,683
; REFERENCE/DOCKET NUMBER: 102.1511
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 661-8000
; TELEFAX: (212) 661-8002
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
; ORGANISM: HIV-1
; FEATURE:
; LOCATION: ENV 312-327
; US-09-248-082-2

Query Match 100.0%; Score 77; DB 3; Length 16;
Best Local Similarity 100.0%; Pred. No. 9.1e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15
Db 2 RIQRGPGRAFTVIGK 16
|||||

RESULT 38
US-08-370-476-35
; Sequence 35, Application US/08370476
; Patent No. 6153408
; GENERAL INFORMATION:
; APPLICANT: Mottez, Estelle
; APPLICANT: Abastado, Jean-Pierre
; APPLICANT: Kourilsky, Philippe
; APPLICANT: Lone, Yu-Chun
; APPLICANT: Ojcius, David
; APPLICANT: Castrouge, Armanda
; TITLE OF INVENTION: Altered Major Histocompatibility Complex
; TITLE OF INVENTION:
; NUMBER OF SEQUENCES: 127
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W., Suite 700
; CITY: Washington
; STATE: D.C.
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
```

```
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/370,476
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/117,575
; FILING DATE: 07-SEP-1993
; APPLICATION NUMBER: US 08/072,787
; FILING DATE: 06-JUN-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/801,818
; FILING DATE: 05-DEC-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/792,473
; FILING DATE: 15-NOV-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 05243.0001-01000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-408-4000
; TELEFAX: 202-408-4400
; INFORMATION FOR SEQ ID NO: 35:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-370-476-35

Query Match 100.0%; Score 77; DB 3; Length 16;
Best Local Similarity 100.0%; Pred. No. 9.1e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFTVIGK 15
DB 2 RIQPGGRAFTVIGK 16

RESULT 39
US-08-992-877-15
; Sequence 15, Application US/08992877
; Patent No. 6340461
; GENERAL INFORMATION:
; APPLICANT: Terman, David S
; TITLE OF INVENTION: SUPERANTIGEN BASED METHODS AND COMPOSITIONS FOR
; FILE REFERENCE: superantigen
; CURRENT APPLICATION NUMBER: US/08/992,877
; CURRENT FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: 60/044,074
; PRIOR FILING DATE: 1997-04-17
; NUMBER OF SEQ ID NOS: 78
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 15
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: antigen
; US-08-992-877-15

Query Match 100.0%; Score 77; DB 3; Length 16;
Best Local Similarity 100.0%; Pred. No. 9.1e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFTVIGK 15
DB 2 RIQPGGRAFTVIGK 16

; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/370,476
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/117,575
; FILING DATE: 07-SEP-1993
; APPLICATION NUMBER: US 08/072,787
; FILING DATE: 06-JUN-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/801,818
; FILING DATE: 05-DEC-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/792,473
; FILING DATE: 15-NOV-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 05243.0001-01000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-408-4000
; TELEFAX: 202-408-4400
; INFORMATION FOR SEQ ID NO: 35:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-370-476-35

Query Match 100.0%; Score 77; DB 3; Length 16;
Best Local Similarity 100.0%; Pred. No. 9.1e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFTVIGK 15
DB 2 RIQPGGRAFTVIGK 16

RESULT 40
PCT-US94-02539-28
; Sequence 28, Application PC/TUS9402539
; GENERAL INFORMATION:
; APPLICANT: Brate, E.M.
; APPLICANT: Brennan, C.A.
; APPLICANT: Bridon, D.P.
; APPLICANT: Jaffe, K.D.
; APPLICANT: Krafft, G.A.
; APPLICANT: Mandeki, W.
; APPLICANT: March, S.C.
; APPLICANT: Russell, J.R.
; APPLICANT: Tue, V.T.
; TITLE OF INVENTION: Genetically Engineered Enzymes
; TITLE OF INVENTION: And Their
; TITLE OF INVENTION: Conjugates For Diagnostic Assays
; NUMBER OF SEQUENCES: 34
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ABBOTT LABORATORIES
; STREET: One Abbott Park Road
; CITY: Abbott Park
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60064-3500
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC Compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: SoftPC
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/02539
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Wong, Wean Khing
; REGISTRATION NUMBER: 33,561
; REFERENCE/DOCKET NUMBER: 5324.PC.01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (708) 938-3517
; TELEFAX: (708) 938-2623
; TELEX:
; INFORMATION FOR SEQ ID NO: 28:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 amino acid residues
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: unknown
; MOLECULE TYPE: peptide
; ORIGINAL SOURCE:
; ORGANISM:
; PCT-US94-02539-28

Query Match 100.0%; Score 77; DB 5; Length 16;
Best Local Similarity 100.0%; Pred. No. 9.1e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFTVIGK 15
DB 2 RIQPGGRAFTVIGK 16

RESULT 41
US-08-015-770B-4
; Sequence 4, Application US/08015770B
; Patent No. 5683695
; GENERAL INFORMATION:
; APPLICANT: Shen, De Fen
; APPLICANT: Wang, Chang Yi
; TITLE OF INVENTION: Production of recombinant proteins
; TITLE OF INVENTION: containing multiple antigenic determinants linked by
; TITLE OF INVENTION: flexible domains
; NUMBER OF SEQUENCES: 73
```

CORRESPONDENCE ADDRESS:  
 ADDRESSEE: United Biomedical, Inc.  
 STREET: 25 Davids Drive  
 CITY: Hauppauge  
 STATE: NY  
 COUNTRY: USA  
 ZIP: 11788  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patent In Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/015,770B  
 FILING DATE: 10-FEB-1993  
 CLASSIFICATION: 435  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Wilson, M. Lisa  
 REGISTRATION NUMBER: 34,045  
 REFERENCE/DOCKET NUMBER: 2002  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (516)273-2828  
 TELEFAX: (516)273-1717  
 INFORMATION FOR SEQ ID NO: 4:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 18 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: peptide  
 US-08-015-770B-4

Query Match 100.0%; Score 77; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 1e-05; Indels 0; Gaps 0;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15  
 |||||  
 Db 4 RIQRGPGRAFTVIGK 18

RESULT 42  
 US-08-121-054C-3  
 Sequence 3, Application US/08121054C  
 Patent No. 5637481  
 GENERAL INFORMATION:  
 APPLICANT: Ledbetter, Jeffrey A.  
 APPLICANT: Gilliland, Lisa K.  
 APPLICANT: Hayden, Martha S.  
 APPLICANT: Linsley, Peter S.  
 APPLICANT: Bajorath, Jurgen  
 APPLICANT: Fell, Perry  
 TITLE OF INVENTION: Expression Vectors Encoding Bispecific  
 TITLE OF INVENTION: Fusion Proteins and Methods of Producing Biologically  
 TITLE OF INVENTION: Active Bispecific Fusion Proteins in a Mammalian Cell  
 NUMBER OF SEQUENCES: 30  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Merchant & Gould  
 STREET: 11150 Santa Monica Blvd., Suite 400  
 CITY: Los Angeles  
 STATE: CA  
 COUNTRY: USA  
 ZIP: 90025  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patent In Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/121,054C  
 FILING DATE: 13-SEP-1993  
 CLASSIFICATION: 435  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/013,420

FILING DATE: 01-FEB-1993  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Adriano, Sarah B.  
 REGISTRATION NUMBER: 34,470  
 REFERENCE/DOCKET NUMBER: 30436.18US01  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 310-445-1140  
 TELEFAX: 310-445-9031  
 INFORMATION FOR SEQ ID NO: 3:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 20 amino acids  
 TYPE: amino acid  
 STRANDEDNESS:  
 TOPOLOGY: linear  
 MOLECULE TYPE: peptide  
 US-08-121-054C-3  
 Query Match 100.0%; Score 77; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.1e-05; Indels 0; Gaps 0;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15  
 |||||  
 Db 5 RIQRGPGRAFTVIGK 19

RESULT 43  
 US-08-488-252-28  
 Sequence 28, Application US/08488252  
 Patent No. 5763160  
 GENERAL INFORMATION:  
 APPLICANT: Chang Yi Wang  
 TITLE OF INVENTION: SYNTHETIC PEPTIDES AND PROCESS  
 TITLE OF INVENTION: OF USING SAME FOR THE DETECTION OF ANTIBODIES TO  
 TITLE OF INVENTION: HUMAN IMMUNODEFICIENCY VIRUS (HIV) GP120 ENVELOPE  
 TITLE OF INVENTION: PROTEIN, DIAGNOSIS OF AIDS AND PRE-AIDS CONDITIONS  
 TITLE OF INVENTION: AND AS VACCINES  
 NUMBER OF SEQUENCES: 38  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: MORGAN & FINNEGAN  
 STREET: 345 PARK AVE.  
 CITY: NEW YORK  
 STATE: NEW YORK  
 COUNTRY: USA  
 ZIP: 10154  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: FLOPPY DISK  
 COMPUTER: IBM PC COMPATIBLE  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: WORDPERFECT 5.1  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/488,252  
 FILING DATE:  
 CLASSIFICATION: 424  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 08/326,676  
 FILING DATE: 07-Jun-1995  
 APPLICATION NUMBER: 07/726,605  
 FILING DATE: 09-July-1991  
 APPLICATION NUMBER: 07/663,262  
 FILING DATE: 01-Mar-1991  
 APPLICATION NUMBER: 07/155,321  
 FILING DATE: 12-Feb-1988  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Maria C. H. Lin  
 REGISTRATION NUMBER: 29,323  
 REFERENCE/DOCKET NUMBER: 1151-4004 USA  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 212-758-4800  
 TELEFAX: (212) 751-6849  
 TELEX: 421792  
 INFORMATION FOR SEQ ID NO: 28:  
 SEQUENCE CHARACTERISTICS:

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; LENGTH: 20 amino acids
; TYPE: Amino acids
; STRANDEDNESS:
; TOPOLOGY: Unknown
US-08-488-252-28

Query Match 100.0%; Score 77; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGGGFAFVTIGK 15
DB 6 RIQGGGFAFVTIGK 20

RESULT 44
US-08-539-436-3
; Sequence 3, Application US/08539436
; Patent No. 6132992
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Gilliland, Lisa K.
; APPLICANT: Hayden, Martha S.
; APPLICANT: Linsley, Peter S.
; APPLICANT: Bajorath, Jurgen
; APPLICANT: Fell, H. Perry
; TITLE OF INVENTION: Expression Vectors Encoding Bispecific
; TITLE OF INVENTION: Fusion Proteins and Methods of Producing Biologically
; TITLE OF INVENTION: Active Bispecific Fusion Proteins in a Mammalian Cell
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Merchant & Gould
; STREET: 11150 Santa Monica Blvd., Suite 400
; CITY: Los Angeles
; STATE: CA
; COUNTRY: USA
; ZIP: 90025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/539,436
; FILING DATE: 05-OCT-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/121,054
; FILING DATE: 13-SEP-1993
; APPLICATION NUMBER: US 08/013,420
; FILING DATE: 01-FEB-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Adriano, Sarah B.
; REGISTRATION NUMBER: 34,470
; REFERENCE/DOCKET INFORMATION:
; TELEPHONE: 310-445-1140
; TELEFAX: 310-445-9031
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-539-436-3

Query Match 100.0%; Score 77; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGGGFAFVTIGK 15
DB 1 RIQGGGFAFVTIGK 15

us-08-869-386-1.ra1

; LENGTH: 20 amino acids
; TYPE: Amino acids
; STRANDEDNESS:
; TOPOLOGY: Unknown
US-08-488-252-28

Query Match 100.0%; Score 77; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGGGFAFVTIGK 15
DB 6 RIQGGGFAFVTIGK 20

RESULT 45
US-09-813-659-3
; Sequence 3, Application US/09813659
; Patent No. 6482919
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden, Martha S.
; APPLICANT: Linsley, Peter S.
; APPLICANT: Bajorath, Jurgen
; APPLICANT: Fell, H. Perry
; APPLICANT: Gilliland, Lisa K.
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING BISPECIFIC FUSION PROTEINS
; TITLE OF INVENTION: AND METHODS OF PRODUCING BIOLOGICALLY ACTIVE BISPECIFIC
; FILE REFERENCE: 30436.18USD2
; CURRENT APPLICATION NUMBER: US/09/813,659
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 09/549,067
; PRIOR FILING DATE: 2000-04-13
; PRIOR APPLICATION NUMBER: 08/539,436
; PRIOR FILING DATE: 1995-10-05
; PRIOR APPLICATION NUMBER: 08/121,054
; PRIOR FILING DATE: 1993-09-13
; PRIOR APPLICATION NUMBER: 08/013,420
; PRIOR FILING DATE: 1993-02-01
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-813-659-3

Query Match 100.0%; Score 77; DB 4; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGGGFAFVTIGK 15
DB 5 RIQGGGFAFVTIGK 19

RESULT 46
US-09-549-067A-3
; Sequence 3, Application US/09549067A
; Patent No. 6623940
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden, Martha S.
; APPLICANT: Linsley, Peter S.
; APPLICANT: Bajorath, Jurgen
; APPLICANT: Fell, H. Perry
; APPLICANT: Gilliland, Lisa K.
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING BISPECIFIC FUSION PROTEINS
; TITLE OF INVENTION: AND METHODS OF PRODUCING BIOLOGICALLY ACTIVE BISPECIFIC
; FILE REFERENCE: 30436.18USC1
; CURRENT APPLICATION NUMBER: US/09/549,067A
; CURRENT FILING DATE: 2000-04-13
; PRIOR APPLICATION NUMBER: 08/539,436
; PRIOR FILING DATE: 1995-10-05
; PRIOR APPLICATION NUMBER: 08/121,054
; PRIOR FILING DATE: 1993-09-13
; PRIOR APPLICATION NUMBER: 08/013,420
; PRIOR FILING DATE: 1993-02-01
; PRIOR APPLICATION NUMBER: 08/228,208
; PRIOR FILING DATE: 1994-04-15
; PRIOR APPLICATION NUMBER: 08/008,898
; PRIOR FILING DATE: 1993-01-22
; PRIOR APPLICATION NUMBER: 07/723,617
```





/ CITY: Toronto  
/ STATE: Ontario  
/ COUNTRY: Canada  
/ ZIP: M5G 1R7  
/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: Floppy disk  
/ COMPUTER: IBM PC compatible  
/ OPERATING SYSTEM: PC-DOS/MS-DOS  
/ SOFTWARE: Patent In Release #1.0, Version #1.25  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: US/08/470,419  
/ FILING DATE:  
/ CLASSIFICATION:  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: 08/290,105  
/ FILING DATE: August 15, 1994  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: STEWART, Michael I  
/ REGISTRATION NUMBER: 24,973  
/ REFERENCE/DOCKET NUMBER: 1038-385 MIS:jb  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (416) 595-1155  
/ TELEFAX: (416) 595-1163  
/ INFORMATION FOR SEQ ID NO: 25:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 21 amino acids  
/ TYPE: amino acid  
/ STRANDEDNESS: single  
/ TOPOLOGY: linear  
/ US-08-470-419-25

Query Match 100.0%; Score 77; DB 2; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGGGFAFTVGK 15  
DB 7 RIQGGGFAFTVGK 21

RESULT 50  
US-08-648-298-18  
/ Sequence 18, Application US/08648298  
/ Patent No. 5871990  
/ GENERAL INFORMATION:  
/ APPLICANT: Henrik Clausen  
/ APPLICANT: Eric Paul Bennett  
/ TITLE OF INVENTION: UDP-N-acetyl-alpha-D-galactosamine:polypeptide  
/ NUMBER OF SEQUENCES: 19  
/ CORRESPONDENCE ADDRESS:  
/ ADDRESSER: Darby & Darby PC  
/ STREET: 805 Third Avenue  
/ CITY: New York  
/ STATE: NY  
/ ZIP: 10022  
/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: Diskette  
/ COMPUTER: IBM PC compatible  
/ OPERATING SYSTEM: DOS  
/ SOFTWARE: Patent In Release #1.0, Version #1.30 (BPO)  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: US/08/648,298  
/ FILING DATE: 15-JUN-1996  
/ CLASSIFICATION: 435  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: Green, Reza  
/ REGISTRATION NUMBER: 38,475  
/ REFERENCE/DOCKET NUMBER: 4035/08865  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: 212527700  
/ TELEFAX: 2127536237  
/ TELEX: 236687

/ INFORMATION FOR SEQ ID NO: 18:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 21 amino acids  
/ TYPE: peptide  
/ STRANDEDNESS: single  
/ TOPOLOGY: linear  
/ MOLECULE TYPE: peptide  
/ ORIGINAL SOURCE:  
/ ORGANISM: Homo sapiens  
/ IMMEDIATE SOURCE:  
/ CLONE: HIV-V3 acceptor peptide  
/ US-08-648-298-18

Query Match 100.0%; Score 77; DB 2; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGGGFAFTVGK 15  
DB 3 RIQGGGFAFTVGK 17

RESULT 51  
US-08-761-828-25  
/ Sequence 25, Application US/08761828  
/ Patent No. 5879925  
/ GENERAL INFORMATION:  
/ APPLICANT: ROVINSKI, Benjamin  
/ APPLICANT: CAO, Shi-Xian  
/ APPLICANT: YAO, Fei-Long  
/ APPLICANT: PERSSON, Roy  
/ APPLICANT: KLEIN, Michel H  
/ TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIONOUS RETROVIRUS-LIKE PARTICLES  
/ NUMBER OF SEQUENCES: 26  
/ CORRESPONDENCE ADDRESS:  
/ ADDRESSEE: Sim & McBurney  
/ STREET: 6TH Floor, 330 University Avenue  
/ CITY: Toronto  
/ STATE: Ontario  
/ COUNTRY: Canada  
/ ZIP: M5G 1R7  
/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: Floppy disk  
/ COMPUTER: IBM PC compatible  
/ OPERATING SYSTEM: PC-DOS/MS-DOS  
/ SOFTWARE: Patent In Release #1.0, Version #1.25  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: US/08/761,828  
/ FILING DATE:  
/ CLASSIFICATION: 435  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: US 08/290,105  
/ FILING DATE: 15-AUG-1994  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: STEWART, Michael I  
/ REGISTRATION NUMBER: 24,973  
/ REFERENCE/DOCKET NUMBER: 1038-655 MIS:jb  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (416) 595-1155  
/ TELEFAX: (416) 595-1163  
/ INFORMATION FOR SEQ ID NO: 25:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 21 amino acids  
/ TYPE: amino acid  
/ STRANDEDNESS: single  
/ TOPOLOGY: linear  
/ US-08-761-828-25

Query Match 100.0%; Score 77; DB 2; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGGGFAFTVGK 15

| DB   | QY   | DB   | QY   |
|--|--|--|--|
| 7 RIORGPGRAFTVIGK 21                                     | 7 RIORGPGRAFTVIGK 21                                     | 7 RIORGPGRAFTVIGK 21                                     | 7 RIORGPGRAFTVIGK 21                                     |
| US-08-452-520B-4   | US-08-452-520B-4   | US-08-452-520B-4   | US-08-452-520B-4   |
| Sequence 4, Application US/08452520B                     | Sequence 4, Application US/08452520B                     | Sequence 4, Application US/08452520B                     | Sequence 4, Application US/08452520B                     |
| Patent No. 5912338                                       | Patent No. 5912338                                       | Patent No. 5912338                                       | Patent No. 5912338                                       |
| Patent No. 5912338 5840872                               | Patent No. 5912338 5840872                               | Patent No. 5912338 5840872                               | Patent No. 5912338 5840872                               |
| GENERAL INFORMATION:                                     | GENERAL INFORMATION:                                     | GENERAL INFORMATION:                                     | GENERAL INFORMATION:                                     |
| APPLICANT: Rovinski, Benjamin                            | APPLICANT: Rovinski, Benjamin                            | APPLICANT: Rovinski, Benjamin                            | APPLICANT: Rovinski, Benjamin                            |
| APPLICANT: Haynes, Joel                                  | APPLICANT: Haynes, Joel                                  | APPLICANT: Haynes, Joel                                  | APPLICANT: Haynes, Joel                                  |
| APPLICANT: Cao, Shi Xian                                 | APPLICANT: Cao, Shi Xian                                 | APPLICANT: Cao, Shi Xian                                 | APPLICANT: Cao, Shi Xian                                 |
| APPLICANT: Klein, Michel H                               | APPLICANT: Klein, Michel H                               | APPLICANT: Klein, Michel H                               | APPLICANT: Klein, Michel H                               |
| TITLE OF INVENTION: Retrovirus-Like Particles Containing | TITLE OF INVENTION: Retrovirus-Like Particles Containing | TITLE OF INVENTION: Retrovirus-Like Particles Containing | TITLE OF INVENTION: Retrovirus-Like Particles Containing |
| TITLE OF INVENTION: Modified Envelope Glycoproteins      | TITLE OF INVENTION: Modified Envelope Glycoproteins      | TITLE OF INVENTION: Modified Envelope Glycoproteins      | TITLE OF INVENTION: Modified Envelope Glycoproteins      |
| NUMBER OF SEQUENCES: 7                                   | NUMBER OF SEQUENCES: 7                                   | NUMBER OF SEQUENCES: 7                                   | NUMBER OF SEQUENCES: 7                                   |
| CORRESPONDENCE ADDRESS:                                  | CORRESPONDENCE ADDRESS:                                  | CORRESPONDENCE ADDRESS:                                  | CORRESPONDENCE ADDRESS:                                  |
| ADDRESSEE: Sim & McBurney                                | ADDRESSEE: Sim & McBurney                                | ADDRESSEE: Sim & McBurney                                | ADDRESSEE: Sim & McBurney                                |
| STREET: 330 University Avenue, 6th Floor                 | STREET: 330 University Avenue, 6th Floor                 | STREET: 330 University Avenue, 6th Floor                 | STREET: 330 University Avenue, 6th Floor                 |
| CITY: Toronto  | CITY: Toronto  | CITY: Toronto  | CITY: Toronto  |
| STATE: Ontario   | STATE: Ontario   | STATE: Ontario   | STATE: Ontario   |
| COUNTRY: Canada  | COUNTRY: Canada  | COUNTRY: Canada  | COUNTRY: Canada  |
| ZIP: M5G 1R7   | ZIP: M5G 1R7   | ZIP: M5G 1R7   | ZIP: M5G 1R7   |
| COMPUTER READABLE FORM:                                  | COMPUTER READABLE FORM:                                  | COMPUTER READABLE FORM:                                  | COMPUTER READABLE FORM:                                  |
| MEDIUM TYPE: Floppy disk                                 | MEDIUM TYPE: Floppy disk                                 | MEDIUM TYPE: Floppy disk                                 | MEDIUM TYPE: Floppy disk                                 |
| COMPUTER: IBM PC compatible                              | COMPUTER: IBM PC compatible                              | COMPUTER: IBM PC compatible                              | COMPUTER: IBM PC compatible                              |
| OPERATING SYSTEM: PC-DOS/MS-DOS                          | OPERATING SYSTEM: PC-DOS/MS-DOS                          | OPERATING SYSTEM: PC-DOS/MS-DOS                          | OPERATING SYSTEM: PC-DOS/MS-DOS                          |
| SOFTWARE: Patent In Release #1.0, Version #1.25          | SOFTWARE: Patent In Release #1.0, Version #1.25          | SOFTWARE: Patent In Release #1.0, Version #1.25          | SOFTWARE: Patent In Release #1.0, Version #1.25          |
| CURRENT APPLICATION DATA:                                | CURRENT APPLICATION DATA:                                | CURRENT APPLICATION DATA:                                | CURRENT APPLICATION DATA:                                |
| APPLICATION NUMBER: US/08/452,520B                       | APPLICATION NUMBER: US/08/452,520B                       | APPLICATION NUMBER: US/08/452,520B                       | APPLICATION NUMBER: US/08/452,520B                       |
| FILING DATE: 30-MAY-1995                                 | FILING DATE: 30-MAY-1995                                 | FILING DATE: 30-MAY-1995                                 | FILING DATE: 30-MAY-1995                                 |
| CLASSIFICATION: 435                                      | CLASSIFICATION: 435                                      | CLASSIFICATION: 435                                      | CLASSIFICATION: 435                                      |
| PRIOR APPLICATION DATA:                                  | PRIOR APPLICATION DATA:                                  | PRIOR APPLICATION DATA:                                  | PRIOR APPLICATION DATA:                                  |
| APPLICATION NUMBER: US 08/073,526                        | APPLICATION NUMBER: US 08/073,526                        | APPLICATION NUMBER: US 08/073,526                        | APPLICATION NUMBER: US 08/073,526                        |
| FILING DATE: 09-JAN-1993                                 | FILING DATE: 09-JAN-1993                                 | FILING DATE: 09-JAN-1993                                 | FILING DATE: 09-JAN-1993                                 |
| CLASSIFICATION: 435                                      | CLASSIFICATION: 435                                      | CLASSIFICATION: 435                                      | CLASSIFICATION: 435                                      |
| ATTORNEY/AGENT INFORMATION:                              | ATTORNEY/AGENT INFORMATION:                              | ATTORNEY/AGENT INFORMATION:                              | ATTORNEY/AGENT INFORMATION:                              |
| NAME: Stewart, Michael I                                 | NAME: Stewart, Michael I                                 | NAME: Stewart, Michael I                                 | NAME: Stewart, Michael I                                 |
| REGISTRATION NUMBER: 24,973                              | REGISTRATION NUMBER: 24,973                              | REGISTRATION NUMBER: 24,973                              | REGISTRATION NUMBER: 24,973                              |
| REFERENCE/DOCKET NUMBER: 1038-446 MIS:as                 | REFERENCE/DOCKET NUMBER: 1038-446 MIS:as                 | REFERENCE/DOCKET NUMBER: 1038-446 MIS:as                 | REFERENCE/DOCKET NUMBER: 1038-446 MIS:as                 |
| TELEPHONE: (416) 595-1155                                | TELEPHONE: (416) 595-1155                                | TELEPHONE: (416) 595-1155                                | TELEPHONE: (416) 595-1155                                |
| TELEFAX: (416) 595-1163                                  | TELEFAX: (416) 595-1163                                  | TELEFAX: (416) 595-1163                                  | TELEFAX: (416) 595-1163                                  |
| INFORMATION FOR SEQ ID NO: 4:                            | INFORMATION FOR SEQ ID NO: 4:                            | INFORMATION FOR SEQ ID NO: 4:                            | INFORMATION FOR SEQ ID NO: 4:                            |
| SEQUENCE CHARACTERISTICS:                                | SEQUENCE CHARACTERISTICS:                                | SEQUENCE CHARACTERISTICS:                                | SEQUENCE CHARACTERISTICS:                                |
| LENGTH: 21 amino acids                                   | LENGTH: 21 amino acids                                   | LENGTH: 21 amino acids                                   | LENGTH: 21 amino acids                                   |
| TYPE: amino acid   | TYPE: amino acid   | TYPE: amino acid   | TYPE: amino acid   |
| STRANDEDNESS: single                                     | STRANDEDNESS: single                                     | STRANDEDNESS: single                                     | STRANDEDNESS: single                                     |
| TOPOLOGY: linear   | TOPOLOGY: linear   | TOPOLOGY: linear   | TOPOLOGY: linear   |
| US-08-452-520B-4   | US-08-452-520B-4   | US-08-452-520B-4   | US-08-452-520B-4   |
| Query Match  | Query Match  | Query Match  | Query Match  |
| Best Local Similarity                                    | Best Local Similarity                                    | Best Local Similarity                                    | Best Local Similarity                                    |
| Matches 15; Conservative 0; Mismatches 0; Indels 0;      | Matches 15; Conservative 0; Mismatches 0; Indels 0;      | Matches 15; Conservative 0; Mismatches 0; Indels 0;      | Matches 15; Conservative 0; Mismatches 0; Indels 0;      |
| QY   | QY   | QY   | QY   |
| 1 RIORGPGRAFTVIGK 15                                     | 1 RIORGPGRAFTVIGK 15                                     | 1 RIORGPGRAFTVIGK 15                                     | 1 RIORGPGRAFTVIGK 15                                     |
| DB   | DB   | DB   | DB   |
| 7 RIORGPGRAFTVIGK 21                                     | 7 RIORGPGRAFTVIGK 21                                     | 7 RIORGPGRAFTVIGK 21                                     | 7 RIORGPGRAFTVIGK 21                                     |
| US-08-290-105-25   | US-08-290-105-25   | US-08-290-105-25   | US-08-290-105-25   |
| Sequence 25, Application US/08290105                     | Sequence 25, Application US/08290105                     | Sequence 25, Application US/08290105                     | Sequence 25, Application US/08290105                     |
| Patent No. 5955342                                       | Patent No. 5955342                                       | Patent No. 5955342                                       | Patent No. 5955342                                       |
| GENERAL INFORMATION:                                     | GENERAL INFORMATION:                                     | GENERAL INFORMATION:                                     | GENERAL INFORMATION:                                     |
| APPLICANT: ROVINSKI, Benjamin                            | APPLICANT: ROVINSKI, Benjamin                            | APPLICANT: ROVINSKI, Benjamin                            | APPLICANT: ROVINSKI, Benjamin                            |
| APPLICANT: CAO, Shi-Xian                                 | APPLICANT: CAO, Shi-Xian                                 | APPLICANT: CAO, Shi-Xian                                 | APPLICANT: CAO, Shi-Xian                                 |
| APPLICANT: YAO, Fei-Long                                 | APPLICANT: YAO, Fei-Long                                 | APPLICANT: YAO, Fei-Long                                 | APPLICANT: YAO, Fei-Long                                 |
| APPLICANT: PERSSON, Roy                                  | APPLICANT: PERSSON, Roy                                  | APPLICANT: PERSSON, Roy                                  | APPLICANT: PERSSON, Roy                                  |
| APPLICANT: KLEIN, Michel H                               | APPLICANT: KLEIN, Michel H                               | APPLICANT: KLEIN, Michel H                               | APPLICANT: KLEIN, Michel H                               |
| TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIOUS  | TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIOUS  | TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIOUS  |  |

REFERENCE/DOCKET NUMBER: 1038-673 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-776-949-25

Query Match 100.0%; Score 77; DB 3; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFTVIGK 15  
DB 7 RIQPGGRAFTVIGK 21

RESULT 55  
US-08-482-810-25  
Sequence 25, Application US/08482810  
Patent No. 6080408  
GENERAL INFORMATION:  
APPLICANT: ROVINSKI, Benjamin  
APPLICANT: CAO, Shi-Xian  
APPLICANT: YAO, Fei-Long  
APPLICANT: PERSSON, Roy  
APPLICANT: KLEIN, Michel H.

TITLE OF INVENTION: RETROVIRUS-LIKE PARTICLES MADE NON-  
INFECTIONOUS BY A PLURALITY OF MUTATIONS  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/482,810  
FILING DATE: 07-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/292,967  
FILING DATE: 22-AUG-1994  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, Michael I  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-490 MIS:vg

TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-482-810-25

Query Match 100.0%; Score 77; DB 3; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFTVIGK 15  
DB 7 RIQPGGRAFTVIGK 21

RESULT 56  
US-09-027-955-25  
Sequence 25, Application US/09027955  
Patent No. 6291157  
GENERAL INFORMATION:  
APPLICANT: ROVINSKI, Benjamin  
APPLICANT: CAO, Shi-Xian  
APPLICANT: YAO, Fei-Long  
APPLICANT: PERSSON, Roy  
APPLICANT: KLEIN, Michel H.

TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIONOUS  
RETROVIRUS-LIKE PARTICLES  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: 6th Floor, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/027,955  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/290,105  
FILING DATE: 15-AUG-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, Michael I  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-798 MIS:jb

TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-09-027-955-25

Query Match 100.0%; Score 77; DB 3; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFTVIGK 15  
DB 7 RIQPGGRAFTVIGK 21

RESULT 57  
US-09-636-805-25  
Sequence 25, Application US/09636805  
Patent No. 6342228  
GENERAL INFORMATION:  
APPLICANT: ROVINSKI, Benjamin  
APPLICANT: CAO, Shi-Xian  
APPLICANT: YAO, Fei-Long  
APPLICANT: PERSSON, Roy  
APPLICANT: KLEIN, Michel H.

TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIONOUS  
RETROVIRUS-LIKE PARTICLES



```
;
; SEQUENCE DESCRIPTION: SEQ ID NO: 25:
US-09-635-754-25
Query Match      100.0%; Score 77; DB 4; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.2e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRFVTVIGK 15
Db 7 RIQGPGRFVTVIGK 21

RESULT 60
US-08-680-525-25
; Sequence 25, Application US/08680525
; Patent No. 6544527
; GENERAL INFORMATION:
; APPLICANT: ROVINSKI, Benjamin
; APPLICANT: CAO, Shi-Xian
; APPLICANT: YAO, Fei-Long
; APPLICANT: PERSSON, ROY
; APPLICANT: KLEIN, Michel H
; TITLE OF INVENTION: RETROVIRUS-LIKE PARTICLES MADE NON-
; TITLE OF INVENTION: INFECTIOUS BY A PLURALITY OF MUTATIONS
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Sim & McBurney
; STREET: Suite 701, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5G 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION NUMBER: US/08/680,525
; FILING DATE:
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/292,967
; FILING DATE: 22-AUG-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, Michael I
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-617 MIS:jb
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-680-525-25

Query Match      100.0%; Score 77; DB 4; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.2e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRFVTVIGK 15
Db 7 RIQGPGRFVTVIGK 21

RESULT 61
US-09-636-223-25
; Sequence 25, Application US/09636223
; Patent No. 6544752
; GENERAL INFORMATION:
; APPLICANT: ROVINSKI, Benjamin
; APPLICANT: CAO, Shi-Xian
; APPLICANT: YAO, Fei-Long
; APPLICANT: PERSSON, ROY
; APPLICANT: KLEIN, Michel H
; TITLE OF INVENTION: RETROVIRUS-LIKE PARTICLES MADE NON-
; TITLE OF INVENTION: INFECTIOUS BY A PLURALITY OF MUTATIONS
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Sim & McBurney
; STREET: 6th Floor, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5G 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION NUMBER: US/09/636,223
; FILING DATE: 29-Dec-2000
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 09/027,955
; FILING DATE: 23-FEB-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, Michael I
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-1064 MIS:jb
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-09-636-223-25

Query Match      100.0%; Score 77; DB 4; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.2e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRFVTVIGK 15
Db 7 RIQGPGRFVTVIGK 21

RESULT 62
US-08-125-012-13
; Sequence 13, Application US/08125012
; Patent No. 5593972
; GENERAL INFORMATION:
; APPLICANT: Weiner, David B.
; APPLICANT: Williams, William V.
; APPLICANT: Wang, Bin
; APPLICANT: Coney, Leslie R.
; TITLE OF INVENTION: Genetic Immunization
; NUMBER OF SEQUENCES: 34
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Woodcock Washburn Kurtz Mackiewicz & No. 5593972r1e
; STREET: One Liberty Place 46th Floor
; CITY: Philadelphia
; STATE: Pennsylvania
; COUNTRY: USA
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
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OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25 mb-MD/JAF  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/125,012  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/029,336  
FILING DATE: 11-MAR-1993  
NAME:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/008,342  
FILING DATE: 26-JAN-1993  
NAME:  
ATTORNEY/AGENT INFORMATION:  
NAME: Deluca, Mark  
REGISTRATION NUMBER: 33,229  
REFERENCE/DOCKET NUMBER: APOL-0013  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 215-568-3100  
TELEFAX: 215-568-3429  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 22 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-125-012-13

Query Match 100.0%; Score 77; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 1.2e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVGK 15  
Db 8 RIQRGPGRAFTVGK 22

RESULT 63  
US-08-783-818-13  
Sequence 13, Application US/08783818  
Patent No. 5817637  
GENERAL INFORMATION:  
APPLICANT: Weiner, David B.  
APPLICANT: Williams, William V.  
APPLICANT: Wang, Bin  
APPLICANT: Coney, Leslie R.  
TITLE OF INVENTION: Genetic Immunization  
NUMBER OF SEQUENCES: 34  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5817637ris  
STREET: One Liberty Place 46th Floor  
CITY: Philadelphia  
STATE: Pennsylvania  
COUNTRY: USA  
ZIP: 19103  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25 mb-MD/JAF  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/783,818  
FILING DATE: 13-JAN-1997  
CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/125,012  
FILING DATE: 21-SEP-1993  
APPLICATION NUMBER: 08/029,336  
FILING DATE: 11-MAR-1993  
CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/008,342

FILING DATE: 26-JAN-1993  
CLASSIFICATION: 514  
ATTORNEY/AGENT INFORMATION:  
NAME: Deluca, Mark  
REGISTRATION NUMBER: 33,229  
REFERENCE/DOCKET NUMBER: APOL-0013  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 215-568-3100  
TELEFAX: 215-568-3429  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 22 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-783-818-13

Query Match 100.0%; Score 77; DB 2; Length 22;  
Best Local Similarity 100.0%; Pred. No. 1.2e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVGK 15  
Db 8 RIQRGPGRAFTVGK 22

RESULT 64  
US-08-453-349-13  
Sequence 13, Application US/08453349  
Patent No. 5830876  
GENERAL INFORMATION:  
APPLICANT: Weiner, David B.  
APPLICANT: Williams, William V.  
APPLICANT: Wang, Bin  
TITLE OF INVENTION: Genetic Immunization  
NUMBER OF SEQUENCES: 34  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5830876ris  
STREET: One Liberty Place 46th Floor  
CITY: Philadelphia  
STATE: Pennsylvania  
COUNTRY: USA  
ZIP: 19103  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25 mb-MD/JAF  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/453,349  
FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/029,336  
FILING DATE: March 11, 1993  
APPLICATION NUMBER: 08/008,342  
FILING DATE: January 26, 1993  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: Deluca, Mark  
REGISTRATION NUMBER: 33,229  
REFERENCE/DOCKET NUMBER: APOL-0013  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 215-568-3100  
TELEFAX: 215-568-3429  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 22 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-453-349-13

Query Match 100.0%; Score 77; DB 2; Length 22;  
Best Local Similarity 100.0%; Pred. No. 1.2e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGGPGRAFTVIGK 15  
|||  
Db 8 RIQGGPGRAFTVIGK 22  
|||

## RESULT 65

US-08-345-321-2  
; Sequence 2, Application US/08345321  
; Patent No. 5914109  
; GENERAL INFORMATION:  
; APPLICANT: ZOLLA-PAZNER, Susan  
; APPLICANT: GORNY, Mirosław K.  
; TITLE OF INVENTION: HETEROHYBRIDOMAS PRODUCING HUMAN  
; TITLE OF INVENTION: MONOCLONAL ANTIBODIES TO HIV-1  
; NUMBER OF SEQUENCES: 22  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Browdy and Neimark  
; STREET: 419 Seventh Street, N.W., Suite 300  
; CITY: Washington  
; STATE: D.C.  
; COUNTRY: USA  
; ZIP: 20004  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/345,321  
; FILING DATE:  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/07/872,675  
; FILING DATE:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Browdy, Roger L.  
; REGISTRATION NUMBER: 25,618  
; REFERENCE/DOCKET NUMBER: ZOLLA-PAZNER1B  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 202-628-5197  
; TELEFAX: 202-737-3528  
; TELEX: 248633  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 22 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; FRAGMENT TYPE: internal  
; ORIGINAL SOURCE:  
; ORGANISM: Homo sapiens  
; INDIVIDUAL ISOLATE: IIIB  
; FEATURE:  
; NAME/KEY: Peptide  
; LOCATION: 1..22  
; OTHER INFORMATION: /note="This sequence corresponds  
; to 303 to 324 of gp120 from the IIIB isolate."  
US-08-345-321-2

Query Match 100.0%; Score 77; DB 2; Length 22;  
Best Local Similarity 100.0%; Pred. No. 1.2e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGGPGRAFTVIGK 15  
|||  
Db 6 RIQGGPGRAFTVIGK 20  
|||

## RESULT 66

US-08-537-245-1

; Sequence 1, Application US/08537245

US-08-979-385B-11  
; Sequence 11, Application US/08979385B  
; Patent No. 5981505  
; GENERAL INFORMATION:  
; APPLICANT: Weiner, David B.  
; APPLICANT: Williams, William V.  
; APPLICANT: Wang, Bin  
; TITLE OF INVENTION: Compositions and Methods for Delivery of  
; NUMBER OF SEQUENCES: 52  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5981505ris  
; STREET: One Liberty Place 46th Floor  
; CITY: Philadelphia  
; STATE: Pennsylvania  
; COUNTRY: USA  
; ZIP: 19103  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25 mb-MD/JAF  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/979,385B  
; FILING DATE: 26-NOV-1997  
; CLASSIFICATION: 514  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/495,684  
; FILING DATE: 28-SEP-1995  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US94/00899  
; FILING DATE: 26-JAN-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/125,012  
; FILING DATE: 21-SEP-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/124,962  
; FILING DATE: 21-SEP-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/093,235  
; FILING DATE: 15-JUL-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/029,336  
; FILING DATE: 11-MAR-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/008,342  
; FILING DATE: 26-JAN-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Deluca, Mark  
; REGISTRATION NUMBER: 33,229  
; REFERENCE/DOCKET NUMBER: UPAP-0253  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 215-568-3100  
; TELEFAX: 215-568-3429  
; INFORMATION FOR SEQ ID NO: 11:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 22 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-08-979-385B-11

Query Match 100.0%; Score 77; DB 2; Length 22;  
Best Local Similarity 100.0%; Pred. No. 1.2e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGGPGRAFTVIGK 15  
|||  
Db 8 RIQGGPGRAFTVIGK 22  
|||

## RESULT 67

US-08-537-245-1

; Sequence 1, Application US/08537245

```
/ Patent No. 5985275
/ GENERAL INFORMATION:
/ APPLICANT: Neurath, A. Robert, Debnath, Asim K.,
/ APPLICANT: Jiang, Shibo
/ TITLE OF INVENTION: Proteins and Peptides Modified By
/ TITLE OF INVENTION: Aromatic Acid Anhydride Compounds
/ NUMBER OF SEQUENCES: 1
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Frislauf, Holtz, Goodman & Woodward
/ STREET: 600 Third Avenue
/ CITY: New York
/ STATE: New York
/ COUNTRY: USA
/ ZIP: 10016
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Diskette, 3+ inch, 0.72 mb storage
/ COMPUTER: IBM PC
/ OPERATING SYSTEM: MS DOS
/ SOFTWARE: ASCII
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/537,245
/ FILING DATE:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 08/420,573
/ FILING DATE:
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Barth, Richard
/ REGISTRATION NUMBER: 28,180
/ REFERENCE/DOCKET NUMBER: 950157/RSB
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (212) 972-1400
/ TELEFAX: (212) 370-1622
/ TELEX: 236268
/ INFORMATION FOR SEQ ID NO: 1:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 22 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single stranded
/ TOPOLOGY: linear
/ MOLECULE TYPE: cDNA to genomic RNA
/ US-08-537-245-1

Query Match 100.0%; Score 77; DB 2; Length 22;
Best Local Similarity 100.0%; Pred. No. 1.2e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15
DB 8 RIQRGPGRAFTVIGK 22

RESULT 68
US-08-805-889-5
/ Sequence 5, Application US/0805889
/ Patent No. 6039957
/ GENERAL INFORMATION:
/ APPLICANT: Earl, Patricia L.
/ APPLICANT: Broder, Christopher C.
/ APPLICANT: Doms, Robert W.
/ APPLICANT: Mose, Bernard
/ TITLE OF INVENTION: Oligomeric HIV-1 Envelope Glycoproteins
/ NUMBER OF SEQUENCES: 6
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Knobbe, Martens, Olson and Bear
/ STREET: 620 Newport Center Drive 16th Floor
/ CITY: Newport Beach
/ STATE: CA
/ ZIP: 92660
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patentin Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/070,291
/ FILING DATE:
/ CLASSIFICATION:
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Venskro, Nancy Ways
/ REGISTRATION NUMBER: 36,298
/ REFERENCE/DOCKET NUMBER: NIH079.1DVCPI
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 619-235-8550
/ TELEFAX: 619-235-0176
/ INFORMATION FOR SEQ ID NO: 5:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 22 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ CURRENT APPLICATION DATA:
```

```
/ APPLICATION NUMBER: US/08/805,889
/ FILING DATE: 03-MAR-1997
/ CLASSIFICATION: 424
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 08/165,314
/ FILING DATE: 10-DEC-1993
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Fuller, Michael L.
/ REGISTRATION NUMBER: 36,516
/ REFERENCE/DOCKET NUMBER: NIH079.001A
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 619-235-8550
/ TELEFAX: 619-235-0176
/ INFORMATION FOR SEQ ID NO: 5:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 22 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
/ HYPOTHETICAL: NO
/ ANTI-SENSE: NO
/ FRAGMENT TYPE: internal
/ US-08-805-889-5

Query Match 100.0%; Score 77; DB 3; Length 22;
Best Local Similarity 100.0%; Pred. No. 1.2e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15
DB 8 RIQRGPGRAFTVIGK 22

RESULT 69
US-09-070-291-5
/ Sequence 5, Application US/09070291
/ Patent No. 6171596
/ GENERAL INFORMATION:
/ APPLICANT: Earl, Patricia L.
/ APPLICANT: Broder, Christopher C.
/ APPLICANT: Doms, Robert W.
/ APPLICANT: Mose, Bernard
/ TITLE OF INVENTION: Oligomeric HIV-1 Envelope Glycoproteins
/ NUMBER OF SEQUENCES: 10
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Knobbe, Martens, Olson and Bear
/ STREET: 620 Newport Center Drive 16th Floor
/ CITY: Newport Beach
/ STATE: CA
/ ZIP: 92660
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patentin Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/070,291
/ FILING DATE:
/ CLASSIFICATION:
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Venskro, Nancy Ways
/ REGISTRATION NUMBER: 36,298
/ REFERENCE/DOCKET NUMBER: NIH079.1DVCPI
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 619-235-8550
/ TELEFAX: 619-235-0176
/ INFORMATION FOR SEQ ID NO: 5:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 22 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ CURRENT APPLICATION DATA:
```



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/ MOLECULE TYPE: peptide
/ HYPOTHETICAL: NO
/ ANTI-SENSE: NO
/ FRAGMENT TYPE: internal
US-09-070-291-5
Query Match 100.0%; Score 77; DB 3; Length 22;
Best Local Similarity 100.0%; Pred. No. 1.2e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGFAFVTIGK 15
Db 8 RIQPGGFAFVTIGK 22

RESULT 70
US-09-217-306B-22
/ Sequence 22, Application US/09217306B
/ Patent No. 6465220
/ GENERAL INFORMATION:
/ APPLICANT: Hassan, Helle
/ APPLICANT: Clausen, Henrik
/ APPLICANT: Bennett, Eric P.
/ TITLE OF INVENTION: Glycosylation Using GalNAc-T4 Transferase
/ FILE REFERENCE: 8850*1
/ CURRENT APPLICATION NUMBER: US/09/217,306B
/ CURRENT FILING DATE: 1998-12-21
/ NUMBER OF SEQ ID NOS: 25
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO 22
/ LENGTH: 22
/ TYPE: PRT
/ ORGANISM: Homo sapiens
/ FEATURE:
/ NAME/KEY: MISC FEATURE
/ OTHER INFORMATION: HIVIIB gp120
US-09-217-306B-22

Query Match 100.0%; Score 77; DB 4; Length 22;
Best Local Similarity 100.0%; Pred. No. 1.2e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGFAFVTIGK 15
Db 3 RIQPGGFAFVTIGK 17

RESULT 71
US-08-880-576-13
/ Sequence 13, Application US/08880576
/ Patent No. 6468982
/ GENERAL INFORMATION:
/ APPLICANT: Weiner, David B.
/ APPLICANT: Williams, William V.
/ APPLICANT: Wang, Bin
/ APPLICANT: Coney, Leslie R.
/ TITLE OF INVENTION: Genetic Immunization
/ NUMBER OF SEQUENCES: 34
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 6468982ris
/ STREET: One Liberty Place 46th Floor
/ CITY: Philadelphia
/ STATE: Pennsylvania
/ COUNTRY: USA
/ ZIP: 19103
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.25 mb-MD/JNF
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/880,576
/ FILING DATE: 23-JUN-1997

/ MOLECULE TYPE: peptide
/ HYPOTHETICAL: NO
/ ANTI-SENSE: NO
/ FRAGMENT TYPE: internal
US-09-070-291-5
Query Match 100.0%; Score 77; DB 3; Length 22;
Best Local Similarity 100.0%; Pred. No. 1.2e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGFAFVTIGK 15
Db 8 RIQPGGFAFVTIGK 22

RESULT 70
US-09-217-306B-22
/ Sequence 22, Application US/09217306B
/ Patent No. 6465220
/ GENERAL INFORMATION:
/ APPLICANT: Hassan, Helle
/ APPLICANT: Clausen, Henrik
/ APPLICANT: Bennett, Eric P.
/ TITLE OF INVENTION: Glycosylation Using GalNAc-T4 Transferase
/ FILE REFERENCE: 8850*1
/ CURRENT APPLICATION NUMBER: US/09/217,306B
/ CURRENT FILING DATE: 1998-12-21
/ NUMBER OF SEQ ID NOS: 25
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO 22
/ LENGTH: 22
/ TYPE: PRT
/ ORGANISM: Homo sapiens
/ FEATURE:
/ NAME/KEY: MISC FEATURE
/ OTHER INFORMATION: HIVIIB gp120
US-09-217-306B-22

Query Match 100.0%; Score 77; DB 4; Length 22;
Best Local Similarity 100.0%; Pred. No. 1.2e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGFAFVTIGK 15
Db 3 RIQPGGFAFVTIGK 17

RESULT 71
US-08-880-576-13
/ Sequence 13, Application US/08880576
/ Patent No. 6468982
/ GENERAL INFORMATION:
/ APPLICANT: Weiner, David B.
/ APPLICANT: Williams, William V.
/ APPLICANT: Wang, Bin
/ APPLICANT: Coney, Leslie R.
/ TITLE OF INVENTION: Genetic Immunization
/ NUMBER OF SEQUENCES: 34
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 6468982ris
/ STREET: One Liberty Place 46th Floor
/ CITY: Philadelphia
/ STATE: Pennsylvania
/ COUNTRY: USA
/ ZIP: 19103
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.25 mb-MD/JNF
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/880,576
/ FILING DATE: 23-JUN-1997

/ CLASSIFICATION: 514
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 08/125,012
/ FILING DATE: 21-SEP-1993
/ APPLICATION NUMBER: 08/029,336
/ FILING DATE: 11-MAR-1993
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 08/008,342
/ FILING DATE: 26-JAN-1993
/ CLASSIFICATION: 514
/ ATTORNEY/AGENT INFORMATION:
/ NAME: DeLuca, Mark
/ REGISTRATION NUMBER: 33,229
/ REFERENCE/DOCKET NUMBER: APOL-0013
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 215-568-3100
/ TELEFAX: 215-568-3429
/ INFORMATION FOR SEQ ID NO: 13:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 22 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
US-08-880-576-13

Query Match 100.0%; Score 77; DB 4; Length 22;
Best Local Similarity 100.0%; Pred. No. 1.2e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGFAFVTIGK 15
Db 8 RIQPGGFAFVTIGK 22

RESULT 72
US-08-097-751-1
/ Sequence 1, Application US/08097751
/ Patent No. 5527666
/ GENERAL INFORMATION:
/ APPLICANT: DeRoosi, Anita
/ APPLICANT: Pasti, Marcella
/ APPLICANT: Mammano, Fabrizio
/ APPLICANT: Panozzo, Marina
/ APPLICANT: Dettin, Monica
/ APPLICANT: DiBello, Carlo
/ APPLICANT: Chieco-Bianchi, Luigi
/ TITLE OF INVENTION: METHOD FOR THE DIAGNOSIS IN VITRO OF
/ TITLE OF INVENTION: HIV-1 VIRUS INFECTIONS
/ NUMBER OF SEQUENCES: 2
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Hedman, Gibson, Costigan & Hoare
/ STREET: 1185 Avenue of the Americas
/ CITY: New York
/ STATE: New York
/ COUNTRY: USA
/ ZIP: 10036
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage
/ COMPUTER: IBM PS/2
/ OPERATING SYSTEM: DOS
/ SOFTWARE: Word Perfect 5.1
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/097,751
/ FILING DATE: 19930723
/ CLASSIFICATION: 530
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER:
/ FILING DATE:
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Costigan, James V.
/ REGISTRATION NUMBER: 25,669
/ REFERENCE/DOCKET NUMBER: 515-4026
/ TELECOMMUNICATION INFORMATION:
```

TELEPHONE: (212) 302-8989  
TELEFAX: (212) 302-8998  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
TOPOLOGY: circular  
US-08-097-751-1

Query Match 100.0%; Score 77; DB 1; Length 24;  
Best Local Similarity 100.0%; Pred. No. 1.3e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGGGFAVTVIGK 15  
DB 8 RIQGGGFAVTVIGK 22

## RESULT 73

US-08-090-148-6  
Sequence 6, Application US/08090148  
Patent No. 5534257  
GENERAL INFORMATION:  
APPLICANT: Mastico, Robert Allan  
APPLICANT: Stockley, Peter George  
APPLICANT: Talbot, Simon John  
TITLE OF INVENTION: Antigen-Presenting Capsid with  
TITLE OF INVENTION: Fusion MS2-Coat Protein  
NUMBER OF SEQUENCES: 6  
CORRESPONDENCE ADDRESS:  
ADDRESS: Rosenman & Colin  
STREET: 575 Madison Avenue  
CITY: New York  
STATE: NY  
COUNTRY: U.S.A.  
ZIP: 10022-2585

COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.5", 1.44Mb  
COMPUTER: IBM PS2-486  
OPERATING SYSTEM: MS-DOS  
SOFTWARE: Wordperfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/090,148  
FILING DATE: 08/11/93  
CLASSIFICATION: 435

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: GB 9101550.3  
FILING DATE: 01/24/91  
APPLICATION NUMBER: PCT/GB92/00124  
FILING DATE: 01/22/92  
ATTORNEY/AGENT INFORMATION:  
NAME: Nissenbaum, Israel  
REGISTRATION NUMBER: 27,582  
REFERENCE/DOCKET NUMBER:  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 940-8636  
TELEFAX: (212) 940-6404  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 AMINO ACIDS  
TYPE: AMINO ACID  
TOPOLOGY: NOT RELEVANT  
MOLECULE TYPE: PEPTIDE  
US-08-090-148-6

Query Match 100.0%; Score 77; DB 1; Length 24;  
Best Local Similarity 100.0%; Pred. No. 1.3e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGGGFAVTVIGK 15  
DB 8 RIQGGGFAVTVIGK 22

## RESULT 74

US-08-257-528B-99  
Sequence 99, Application US/08257528B  
Patent No. 5639854  
GENERAL INFORMATION:  
APPLICANT: SIA, Charles D.Y.  
APPLICANT: CHONG, Pele  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: MSG 1R7

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/257,528B  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424

ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-336 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 99:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-257-528B-99

Query Match 100.0%; Score 77; DB 1; Length 24;  
Best Local Similarity 100.0%; Pred. No. 1.3e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGGGFAVTVIGK 15  
DB 7 RIQGGGFAVTVIGK 21

## RESULT 75

US-08-460-602A-99  
Sequence 99, Application US/08460602A  
Patent No. 5759769  
GENERAL INFORMATION:  
APPLICANT: SIA, Charles D.Y.  
APPLICANT: CHONG, Pele  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: MSG 1R7

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25

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; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/460,602A
; FILING DATE: 02-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/257,528
; FILING DATE: 09-JUN-1994
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/073,378
; FILING DATE: 09-JUN-1993
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, MICHAEL I.
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-450 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 99:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
US-08-460-602A-99

Query Match 100.0%; Score 77; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 1.3e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRFAVTVIGK 15
DB 7 RIQGPGRFAVTVIGK 21

RESULT 76
US-08-463-966A-99
; Sequence 99, Application US/08463966A
; Patent No. 5795955
; GENERAL INFORMATION:
; APPLICANT: SIA, Charles D.Y.
; APPLICANT: CHONG, Pele
; APPLICANT: KLEIN, Michel H.
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides
; NUMBER OF SEQUENCES: 101
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: Suite 701, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: MSG IR7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/463,966A
; FILING DATE: 05-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/257,528
; FILING DATE: 09-JUN-1994
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, MICHAEL I.
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-450 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 99:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
US-08-463-966A-99

Query Match 100.0%; Score 77; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 1.3e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRFAVTVIGK 15
DB 7 RIQGPGRFAVTVIGK 21

RESULT 77
US-08-465-217A-99
; Sequence 99, Application US/08465217A
; Patent No. 580822
; GENERAL INFORMATION:
; APPLICANT: SIA, Charles D.Y.
; APPLICANT: CHONG, Pele
; APPLICANT: KLEIN, Michel H.
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides
; NUMBER OF SEQUENCES: 101
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: Suite 701, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: MSG IR7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/465,217A
; FILING DATE: 05-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/257,528
; FILING DATE: 09-JUN-1994
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/073,378
; FILING DATE: 09-JUN-1993
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, MICHAEL I.
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-486 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 99:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
US-08-465-217A-99

Query Match 100.0%; Score 77; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 1.3e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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; REFERENCE/DOCKET NUMBER: 1038-487 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 99:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
US-08-463-966A-99

Query Match 100.0%; Score 77; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 1.3e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRFAVTVIGK 15
DB 7 RIQGPGRFAVTVIGK 21

RESULT 77
US-08-465-217A-99
; Sequence 99, Application US/08465217A
; Patent No. 580822
; GENERAL INFORMATION:
; APPLICANT: SIA, Charles D.Y.
; APPLICANT: CHONG, Pele
; APPLICANT: KLEIN, Michel H.
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides
; NUMBER OF SEQUENCES: 101
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: Suite 701, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: MSG IR7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/465,217A
; FILING DATE: 05-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/257,528
; FILING DATE: 09-JUN-1994
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/073,378
; FILING DATE: 09-JUN-1993
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, MICHAEL I.
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-486 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 99:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
US-08-465-217A-99

Query Match 100.0%; Score 77; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 1.3e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```



; FILING DATE: 05-JUN-1995  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/257,528  
; FILING DATE: 09-JUN-1994  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/073,378  
; FILING DATE: 09-JUN-1993  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: STEWART, MICHAEL I.  
; REGISTRATION NUMBER: 24,973  
; REFERENCE/DOCKET NUMBER: 1038-451 MIS:jb  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 595-1155  
; TELEFAX: (416) 595-1163  
; INFORMATION FOR SEQ ID NO: 99:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 24 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; US-08-462-507A-99

Query Match 100.0%; Score 77; DB 2; Length 24;  
Best Local Similarity 100.0%; Pred. No. 1.3e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTVIGK 15  
Db 7 RIQPGGRAFTVIGK 21

## RESULT 81

US-08-146-028-160  
; Sequence 160, Application US/08146028  
; Patent No. 5891640  
; GENERAL INFORMATION:

; APPLICANT:  
; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES  
; TITLE OF INVENTION: CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR  
; TITLE OF INVENTION: IN A PROCESS FOR DETERMINATION OF ANTIBODIES OR BIOTINYLATED  
; TITLE OF INVENTION: PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES,  
; TITLE OF INVENTION: PROCESS FOR PREPARING THEM AND COMPOSITIONS CONTAINING THEM  
; NUMBER OF SEQUENCES: 453  
; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.25 (EPO)  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/146,028  
; INFORMATION FOR SEQ ID NO: 160:

; SEQUENCE CHARACTERISTICS:  
; LENGTH: 24 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; US-08-146-028-160

Query Match 100.0%; Score 77; DB 2; Length 24;  
Best Local Similarity 100.0%; Pred. No. 1.3e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTVIGK 15  
Db 8 RIQPGGRAFTVIGK 22

## RESULT 82

US-08-467-881A-99

; Sequence 99, Application US/08467881A  
; Patent No. 5951986  
; GENERAL INFORMATION:  
; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; APPLICANT: KLEIN, Michel H.  
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
; NUMBER OF SEQUENCES: 101  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: Suite 701, 330 University Avenue  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: M5G 1R7

; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/467,881A  
; FILING DATE: 06-JUN-1995  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/073,378  
; FILING DATE: 09-JUN-1993  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: STEWART, MICHAEL I.  
; REGISTRATION NUMBER: 24,973  
; REFERENCE/DOCKET NUMBER: 1038-488 MIS:jb  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 595-1155  
; TELEFAX: (416) 595-1163  
; INFORMATION FOR SEQ ID NO: 99:

; SEQUENCE CHARACTERISTICS:  
; LENGTH: 24 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; US-08-467-881A-99

Query Match 100.0%; Score 77; DB 2; Length 24;  
Best Local Similarity 100.0%; Pred. No. 1.3e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTVIGK 15  
Db 7 RIQPGGRAFTVIGK 21

## RESULT 83

US-08-723-425A-160  
; Sequence 160, Application US/08723425A  
; Patent No. 6165730  
; GENERAL INFORMATION:

; APPLICANT: DELEYS, ROBERT  
; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF  
; TITLE OF INVENTION: PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT  
; TITLE OF INVENTION: EPITOPES AND THEIR USE IN A PROCESS FOR DETERMINATION OF  
; TITLE OF INVENTION: ANTIBODIES OR BIOTINYLATED PEPTIDES CORRESPONDING ...  
; NUMBER OF SEQUENCES: 453  
; CORRESPONDENCE ADDRESS:

; ADDRESSEE: NIXON & VANDERHUYE, P.C.  
; STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR  
; CITY: Arlington  
; STATE: VA  
; COUNTRY: USA

ZIP: 22201  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/723,425A  
FILING DATE:  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: SADOFF, B.J.  
REGISTRATION NUMBER: 36,663  
REFERENCE/DOCKET NUMBER: 1487-13  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-816-4000  
TELEFAX: 703-816-4100  
INFORMATION FOR SEQ ID NO: 160:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-723-425A-160

Query Match 100.0%; Score 77; DB 3; Length 24;  
Best Local Similarity 100.0%; Pred. No. 1.3e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15  
Db 8 RIQRGPGRAFTVIGK 22

RESULT 84  
US-08-480-332-2  
Sequence 2, Application US/08480332  
Patent No. 6180134  
GENERAL INFORMATION:  
APPLICANT: Zalipsky, Samuel; Woodle, Martin; Martin, Francis;  
APPLICANT: Barenholz, Yechezkel  
TITLE OF INVENTION: Enhanced Circulation Effector Composition and  
TITLE OF INVENTION: Method  
NUMBER OF SEQUENCES: 10  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Dehlinger & Associates  
STREET: 350 Cambridge Avenue, Suite 250  
CITY: Palo Alto  
STATE: CA  
COUNTRY: USA  
ZIP: 94306  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/480,332  
FILING DATE: 7-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/316,436  
FILING DATE: 29-SEP-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/035,443  
FILING DATE: 23-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Mohr, Judy M.  
REGISTRATION NUMBER: 38,563  
REFERENCE/DOCKET NUMBER: 5325-0115.31  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 324-0880

TELEFAX: (415) 324-0960  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
STRANDEDNESS: unknown  
TOPOLOGY: unknown  
MOLECULE TYPE: peptide  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
INDIVIDUAL ISOLATE: Peptide 2, Fig. 13  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 1..15  
US-08-480-332-2

Query Match 100.0%; Score 77; DB 3; Length 24;  
Best Local Similarity 100.0%; Pred. No. 1.3e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15  
Db 8 RIQRGPGRAFTVIGK 22

RESULT 85  
US-09-112-206-160  
Sequence 160, Application US/09112206  
Patent No. 6210903  
GENERAL INFORMATION:  
APPLICANT:  
TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES  
CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR  
TITLE OF INVENTION: IN A PROCESS FOR DETERMINATION OF ANTIBODIES OR BIOTINYLATED  
TITLE OF INVENTION: PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES,  
TITLE OF INVENTION: PROCESS FOR PREPARING THEM AND COMPOSITIONS CONTAINING THEM  
NUMBER OF SEQUENCES: 453  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/112,206  
FILING DATE:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/146,028  
FILING DATE:  
INFORMATION FOR SEQ ID NO: 160:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-09-112-206-160

Query Match 100.0%; Score 77; DB 3; Length 24;  
Best Local Similarity 100.0%; Pred. No. 1.3e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15  
Db 8 RIQRGPGRAFTVIGK 22

RESULT 86  
US-09-790-497A-14  
Sequence 14, Application US/09790497A  
Patent No. 6649735  
GENERAL INFORMATION:  
APPLICANT: De Leys, Robert

;; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING  
;; TITLE OF INVENTION: TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN  
;; TITLE OF INVENTION: A PROCESS FOR DETERMINATION OF ANTIBODIES OF  
;; TITLE OF INVENTION: BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT  
;; TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS  
;; TITLE OF INVENTION: CONTAINING THEM

;; FILE REFERENCE: 2752-16  
;; CURRENT APPLICATION NUMBER: US/09/790,497A  
;; CURRENT FILING DATE: 2001-02-23  
;; PRIOR APPLICATION NUMBER: 09/576,824  
;; PRIOR FILING DATE: 2000-05-23  
;; PRIOR APPLICATION NUMBER: 08/723,425  
;; PRIOR FILING DATE: 1996-09-30  
;; PRIOR APPLICATION NUMBER: 09/146,028  
;; PRIOR FILING DATE: 1993-11-22  
;; PRIOR APPLICATION NUMBER: PCT/EP93/00517  
;; PRIOR FILING DATE: 1993-03-08  
;; PRIOR APPLICATION NUMBER: EP 92400598.6  
;; PRIOR FILING DATE: 1992-03-06  
;; NUMBER OF SEQ ID NOS: 600  
;; SOFTWARE: PatentIn Ver. 2.1  
;; SEQ ID NO 14  
;; LENGTH: 24  
;; TYPE: PRT  
;; ORGANISM: Human immunodeficiency virus  
US-09-790-497A-14

Query Match 100.0%; Score 77; DB 4; Length 24;  
Best Local Similarity 100.0%; Pred. No. 1.3e-05; Indels 0; Gaps 0;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFTVIGK 15  
DB 8 RIQPGGRAFTVIGK 22

## RESULT 87

US-09-790-497A-160  
;; Sequence 160, Application US/09790497A  
;; Patent No. 6649735  
;; GENERAL INFORMATION:  
;; APPLICANT: De Leys, Robert  
;; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING  
;; TITLE OF INVENTION: TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN  
;; TITLE OF INVENTION: A PROCESS FOR DETERMINATION OF ANTIBODIES OF  
;; TITLE OF INVENTION: BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT  
;; TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS  
;; TITLE OF INVENTION: CONTAINING THEM  
;; FILE REFERENCE: 2752-16  
;; CURRENT APPLICATION NUMBER: US/09/790,497A  
;; CURRENT FILING DATE: 2001-02-23  
;; PRIOR APPLICATION NUMBER: 09/576,824  
;; PRIOR FILING DATE: 2000-05-23  
;; PRIOR APPLICATION NUMBER: 08/723,425  
;; PRIOR FILING DATE: 1996-09-30  
;; PRIOR APPLICATION NUMBER: 09/146,028  
;; PRIOR FILING DATE: 1993-11-22  
;; PRIOR APPLICATION NUMBER: PCT/EP93/00517  
;; PRIOR FILING DATE: 1993-03-08  
;; PRIOR APPLICATION NUMBER: EP 92400598.6  
;; PRIOR FILING DATE: 1992-03-06  
;; NUMBER OF SEQ ID NOS: 600  
;; SOFTWARE: PatentIn Ver. 2.1  
;; SEQ ID NO 160  
;; LENGTH: 24  
;; TYPE: PRT  
;; ORGANISM: Human immunodeficiency virus  
US-09-790-497A-160

Query Match 100.0%; Score 77; DB 4; Length 24;  
Best Local Similarity 100.0%; Pred. No. 1.3e-05; Indels 0; Gaps 0;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFTVIGK 15  
DB 8 RIQPGGRAFTVIGK 22

## RESULT 88

US-09-576-824A-160  
;; Sequence 160, Application US/09576824A  
;; Patent No. 6667387  
;; GENERAL INFORMATION:  
;; APPLICANT: De Leys, Robert  
;; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING  
;; TITLE OF INVENTION: TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN  
;; TITLE OF INVENTION: A PROCESS FOR DETERMINATION OF ANTIBODIES OF  
;; TITLE OF INVENTION: BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT  
;; TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS  
;; TITLE OF INVENTION: CONTAINING THEM  
;; FILE REFERENCE: 2752-11  
;; CURRENT APPLICATION NUMBER: US/09/576,824A  
;; CURRENT FILING DATE: 2000-05-23  
;; PRIOR APPLICATION NUMBER: 08/723,425  
;; PRIOR FILING DATE: 1996-09-30  
;; PRIOR APPLICATION NUMBER: 09/146,028  
;; PRIOR FILING DATE: 1993-11-22  
;; PRIOR APPLICATION NUMBER: PCT/EP93/00517  
;; PRIOR FILING DATE: 1993-03-08  
;; PRIOR APPLICATION NUMBER: EP 92400598.6  
;; PRIOR FILING DATE: 1992-03-06  
;; NUMBER OF SEQ ID NOS: 600  
;; SOFTWARE: PatentIn Ver. 2.1  
;; SEQ ID NO 160  
;; LENGTH: 24  
;; TYPE: PRT  
;; ORGANISM: Human immunodeficiency virus  
US-09-576-824A-160

Query Match 100.0%; Score 77; DB 4; Length 24;  
Best Local Similarity 100.0%; Pred. No. 1.3e-05; Indels 0; Gaps 0;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFTVIGK 15  
DB 8 RIQPGGRAFTVIGK 22

## RESULT 89

US-09-680-497-160  
;; Sequence 160, Application US/09680497  
;; Patent No. 6709828  
;; GENERAL INFORMATION:  
;; APPLICANT:  
;; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES  
;; TITLE OF INVENTION: CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR  
;; TITLE OF INVENTION: IN A PROCESS FOR DETERMINATION OF ANTIBODIES OR BIOTINYLATED  
;; TITLE OF INVENTION: PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES,  
;; TITLE OF INVENTION: PROCESS FOR PREPARING THEM AND COMPOSITIONS CONTAINING THEM  
;; NUMBER OF SEQUENCES: 453  
;; COMPUTER READABLE FORM:  
;; MEDIUM TYPE: Floppy disk  
;; COMPUTER: IBM PC compatible  
;; OPERATING SYSTEM: PC-DOS/MS-DOS  
;; SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)  
;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/09/680,497  
;; FILING DATE: 06-OCT-2000  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: US/08/146,028  
;; FILING DATE: 22-NOV-1993  
;; INFORMATION FOR SEQ ID NO: 160:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 24 amino acids  
;; TYPE: amino acid  
;; STRANDEDNESS: single

;  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-09-680-497-160

Query Match 100.0%; Score 77; DB 4; Length 24;  
Best Local Similarity 100.0%; Pred. No. 1.3e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTVIGK 15  
| | | | | | | | | | | | | | | | | | | | | |  
Db 8 RIQPGGRAFTVIGK 22

RESULT 90  
PCT-US92-06688-12  
; Sequence 12, Application PC/TUS9206688  
; GENERAL INFORMATION:  
; APPLICANT: REPLIGEN CORPORATION  
; APPLICANT: THE ROCKFELLER UNIVERSITY  
; TITLE OF INVENTION: MULTIPLE ANTIGEN PEPTIDES FOR USE AS HIV  
; NUMBER OF SEQUENCES: 21  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Fish & Richardson  
; STREET: 225 Franklin Street  
; CITY: Boston  
; STATE: Massachusetts  
; COUNTRY: U.S.A.  
; ZIP: 02110-2804  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
; COMPUTER: IBM PS/2 Model 502 or 55SX  
; OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)  
; SOFTWARE: WordPerfect (Version 5.1)  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US92/06688  
; FILING DATE: 19920811  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 744,281  
; FILING DATE: 13 August 1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Paul T. Clark  
; REGISTRATION NUMBER: 30,162  
; REFERENCE/DOCKET NUMBER: 00231/052W01  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (617) 542-5070  
; TELEFAX: (617) 542-8906  
; INFORMATION FOR SEQ ID NO: 12:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 24  
; TYPE: AMINO ACID  
; TOPOLOGY: linear  
PCT-US92-06688-12

Query Match 100.0%; Score 77; DB 5; Length 24;  
Best Local Similarity 100.0%; Pred. No. 1.3e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTVIGK 15  
| | | | | | | | | | | | | | | | | | | | | |  
Db 8 RIQPGGRAFTVIGK 22

RESULT 91  
PCT-US92-10378-3  
; Sequence 3, Application PC/TUS9210378  
; GENERAL INFORMATION:  
; APPLICANT: BOARD OF REGENTS, THE UNIVERSITY OF  
; APPLICANT: TEXAS SYSTEM  
; APPLICANT: SASTRY, Jagannatha K.  
; APPLICANT: ARLINGHAUS, Ralph B.

;  
; APPLICANT: PLATSOUKAS, Chris D.  
; APPLICANT: NEHETE, Pramod N.  
; TITLE OF INVENTION: METHODS AND COMPOSITIONS  
; TITLE OF INVENTION: FOR ELICITING IMMUNE OR ANTI-INFECTION RESPONSES  
; NUMBER OF SEQUENCES: 7  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Arnold, White & Durkee  
; STREET: P.O. Box 4433  
; CITY: Houston  
; STATE: Texas  
; COUNTRY: US  
; ZIP: 77210  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: WordPerfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US92/10378  
; FILING DATE: 19921202  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 07/800,932  
; FILING DATE: December 2, 1991  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 07/945865  
; FILING DATE: September 16, 1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Parker, David L.  
; REGISTRATION NUMBER: 32,165  
; REFERENCE/DOCKET NUMBER: UTF305PCT  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 512-320-7200  
; TELEFAX: 512-474-7577  
; TELEX: Not Applicable  
; INFORMATION FOR SEQ ID NO: 3:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 24 amino acids  
; TYPE: AMINO ACID  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
PCT-US92-10378-3

Query Match 100.0%; Score 77; DB 5; Length 24;  
Best Local Similarity 100.0%; Pred. No. 1.3e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTVIGK 15  
| | | | | | | | | | | | | | | | | | | | | |  
Db 8 RIQPGGRAFTVIGK 22

RESULT 92  
US-07-950-571A-1  
; Sequence 1, Application US/07950571A  
; Patent No. 5854400  
; GENERAL INFORMATION:  
; APPLICANT: Chang, Tse Wen, Fung, Michael S.C., Sun, Bill N.C., Sun, Cecily R.Y.,  
; APPLICANT: Chang, Nancy T.  
; TITLE OF INVENTION: Monoclonal Antibodies which Neutralize HIV-1 Infection  
; NUMBER OF SEQUENCES: 8  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Tanox Biosystems, Inc.  
; STREET: 10301 Stella Link Rd.  
; CITY: Houston  
; STATE: Texas  
; COUNTRY: USA  
; ZIP: 77025  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5" Hi Density Diskette  
; COMPUTER: IBM PS/2  
; OPERATING SYSTEM: DOS, Version 3.30



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/ SOFTWARE: Wordperfect 5.1
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/07/950,571A
/ FILING DATE: 19920922
/ CLASSIFICATION: 435
/ PRIOR APPLICATION NUMBER: No. 5854400 07/767,533
/ FILING DATE: 09/26/1991
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Mirabel, Eric P.
/ REGISTRATION NUMBER: 31,211
/ REFERENCE/DOCKET NUMBER: TXN87-11BBC
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 713-664-2288
/ TELEFAX: 713-664-8914
/ INFORMATION FOR SEQ ID NO: 1:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 25 amino acids
/ TYPE: AMINO ACID
/ TOPOLOGY: Linear
/ US-07-950-571A-1

Query Match 100.0%; Score 77; DB 2; Length 25;
Best Local Similarity 100.0%; Pred. No. 1.4e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFTVIGK 15
   |||||
Db 11 RIQPGGRAFTVIGK 25

RESULT 93
US-08-266-448-1
; Sequence 1, Application US/08266448
; Patent No. 5876724
; GENERAL INFORMATION:
; APPLICANT: GIRARD, Marc
; TITLE OF INVENTION: INDUCTION OF PROTECTION AGAINST VIRAL
; TITLE OF INVENTION: INFECTION BY SYNERGY BETWEEN VIRUS ENVELOPE GLYCOPROTEIN
; TITLE OF INVENTION: AND PEPTIDES CORRESPONDING TO NEUTRALIZATION EPITOPES OF
; TITLE OF INVENTION: THE GLYCOPROTEIN
; NUMBER OF SEQUENCES: 23
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FINNEGAN, HENDERSON, FARABOW, GARRETT &
; ADDRESSEE: DUNNER, L.L.P
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: U.S.A.
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/266,448
; FILING DATE: 28-JUN-1994
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/145,664
; FILING DATE: 04-NOV-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/782,241
; FILING DATE: 28-OCT-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/672,647
; FILING DATE: 18-MAR-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/494,749
; FILING DATE: 19-MAR-1990
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
```

```
/ REGISTRATION NUMBER: 25,146
/ REFERENCE/DOCKET NUMBER: 03495.0088-13
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (202) 408-4132
/ TELEFAX: (202) 408-4400
/ INFORMATION FOR SEQ ID NO: 1:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 25 amino acids
/ TYPE: amino acid
/ STRANDEDNESS:
/ TOPOLOGY: not relevant
/ MOLECULE TYPE: peptide
/ US-08-266-448-1

Query Match 100.0%; Score 77; DB 2; Length 25;
Best Local Similarity 100.0%; Pred. No. 1.4e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFTVIGK 15
   |||||
Db 8 RIQPGGRAFTVIGK 22

RESULT 94
US-08-485-324-13
; Sequence 13, Application US/08485324
; Patent No. 6043093
; GENERAL INFORMATION:
; APPLICANT: Wohlschlaeger, Jacob
; TITLE OF INVENTION: SELECTION METHODS
; NUMBER OF SEQUENCES: 31
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Curtis, Morris, & Safford
; ADDRESSEE: c/o Barry Evans
; STREET: 530 Fifth Avenue
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/485,324
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/235,437
; FILING DATE: 29-APR-1994
; APPLICATION NUMBER: US 07/852,412
; FILING DATE: 16-MAR-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Evans, Barry
; REGISTRATION NUMBER: 22,802
; REFERENCE/DOCKET NUMBER: 370132-2000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 840-3333
; TELEFAX: (212) 840-0712
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
/ US-08-485-324-13

Query Match 100.0%; Score 77; DB 3; Length 25;
Best Local Similarity 100.0%; Pred. No. 1.4e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFTVIGK 15
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```
Db      ||||| ||||| ||||| |||||
      8 RIQGGGFAVTVIGK 22

RESULT 95
US-08-485-324-31
; Sequence 31, Application US/08485324
; Patent No. 6043093
; GENERAL INFORMATION:
; APPLICANT: Wohlstadter, Jacob
; TITLE OF INVENTION: SELECTION METHODS
; NUMBER OF SEQUENCES: 31
; CORRESPONDENCE ADDRESS:
; ADDRESSES: Curtis, Morris, & Safford
; ADDRESSEE: c/o Barry Evans
; STREET: 530 Fifth Avenue
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/485,324
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/235,437
; FILING DATE: 29-APR-1994
; APPLICATION NUMBER: US 07/852,412
; FILING DATE: 16-MAR-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Evans, Barry
; REGISTRATION NUMBER: 22,802
; REFERENCE/DOCKET NUMBER: 370132-2000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 840-3333
; TELEFAX: (212) 840-0712
; INFORMATION FOR SEQ ID NO: 31:
; LENGTH: 25 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-485-324-31

Query Match      100.0%; Score 77; DB 3; Length 25;
Best Local Similarity 100.0%; Pred. No. 1.4e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RIQGGGFAVTVIGK 15
Db      ||||| ||||| ||||| |||||
      8 RIQGGGFAVTVIGK 22

RESULT 97
US-08-447-506-31
; Sequence 31, Application US/08447506
; Patent No. 6066499
; GENERAL INFORMATION:
; APPLICANT: Wohlstadter, Jacob
; TITLE OF INVENTION: SELECTION METHODS
; NUMBER OF SEQUENCES: 31
; CORRESPONDENCE ADDRESS:
; ADDRESSES: Curtis, Morris, & Safford
; ADDRESSEE: c/o Barry Evans
; STREET: 530 Fifth Avenue
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/447,506
; FILING DATE: 23-MAY-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/235,437
; FILING DATE: 29-APR-1994
; APPLICATION NUMBER: US 07/852,412
; FILING DATE: 16-MAR-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Evans, Barry
; REGISTRATION NUMBER: 22,802
; REFERENCE/DOCKET NUMBER: 370132-2000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 840-3333
; TELEFAX: (212) 840-0712
; INFORMATION FOR SEQ ID NO: 31:
; LENGTH: 25 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-447-506-31

Query Match      100.0%; Score 77; DB 3; Length 25;
Best Local Similarity 100.0%; Pred. No. 1.4e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RIQGGGFAVTVIGK 15
Db      ||||| ||||| ||||| |||||
      8 RIQGGGFAVTVIGK 22

RESULT 98
US-08-447-506-13
; Sequence 13, Application US/08447506
; Patent No. 6066499
; GENERAL INFORMATION:
; APPLICANT: Wohlstadter, Jacob
; TITLE OF INVENTION: SELECTION METHODS
; NUMBER OF SEQUENCES: 31
; CORRESPONDENCE ADDRESS:
; ADDRESSES: Curtis, Morris, & Safford
; ADDRESSEE: c/o Barry Evans
; STREET: 530 Fifth Avenue
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/447,506
; FILING DATE: 23-MAY-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/235,437
; FILING DATE: 29-APR-1994
; APPLICATION NUMBER: US 07/852,412
; FILING DATE: 16-MAR-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Evans, Barry
; REGISTRATION NUMBER: 22,802
; REFERENCE/DOCKET NUMBER: 370132-2000
```

TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 840-3333  
TELEFAX: (212) 840-0712  
INFORMATION FOR SEQ ID NO: 31:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 25 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-447-506-31

Query Match 100.0%; Score 77; DB 3; Length 25;  
Best Local Similarity 100.0%; Pred. No. 1.4e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15  
Db 8 RIQRGPGRAFTVIGK 22

## RESULT 98

US-08-235-437-13  
Sequence 13, Application US/08235437  
Patent No. 6087177

GENERAL INFORMATION:  
APPLICANT: Wohlstadter, Jacob  
TITLE OF INVENTION: SELECTION METHODS  
NUMBER OF SEQUENCES: 31  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Curtis, Morris, & Safford  
ADDRESS: c/o Barry Evans  
STREET: 530 Fifth Avenue  
CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10036

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/235,437  
FILING DATE: 29-APR-1994  
CLASSIFICATION: 435

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/852,412  
FILING DATE: 16-MAR-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Evans, Barry  
REGISTRATION NUMBER: 22,802  
REFERENCE/DOCKET NUMBER: 370132-2000  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 840-3333  
TELEFAX: (212) 840-0712  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 25 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-235-437-13

Query Match 100.0%; Score 77; DB 3; Length 25;  
Best Local Similarity 100.0%; Pred. No. 1.4e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15  
Db 8 RIQRGPGRAFTVIGK 22

## RESULT 99

US-08-235-437-31  
Sequence 31, Application US/08235437  
Patent No. 6087177

GENERAL INFORMATION:  
APPLICANT: Wohlstadter, Jacob  
TITLE OF INVENTION: SELECTION METHODS  
NUMBER OF SEQUENCES: 31  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Curtis, Morris, & Safford  
ADDRESS: c/o Barry Evans  
STREET: 530 Fifth Avenue  
CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10036

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/235,437  
FILING DATE: 29-APR-1994  
CLASSIFICATION: 435

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/852,412  
FILING DATE: 16-MAR-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Evans, Barry  
REGISTRATION NUMBER: 22,802  
REFERENCE/DOCKET NUMBER: 370132-2000  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 840-3333  
TELEFAX: (212) 840-0712  
INFORMATION FOR SEQ ID NO: 31:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 25 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-235-437-31

Query Match 100.0%; Score 77; DB 3; Length 25;  
Best Local Similarity 100.0%; Pred. No. 1.4e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15  
Db 8 RIQRGPGRAFTVIGK 22

## RESULT 100

US-08-447-515-13  
Sequence 13, Application US/08447515  
Patent No. 6162640

GENERAL INFORMATION:  
APPLICANT: Wohlstadter, Jacob  
TITLE OF INVENTION: SELECTION METHODS  
NUMBER OF SEQUENCES: 31  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Curtis, Morris, & Safford  
ADDRESS: c/o Barry Evans  
STREET: 530 Fifth Avenue  
CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10036

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:

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; APPLICATION NUMBER: US/08/447,515
; FILING DATE: 23-MAY-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/235,437
; FILING DATE: 29-APR-1994
; APPLICATION NUMBER: US 07/852,412
; FILING DATE: 16-MAR-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Evans, Barry
; REGISTRATION NUMBER: 22,802
; REFERENCE/DOCKET NUMBER: 370132-2000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 840-3333
; TELEFAX: (212) 840-0712
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-447-515-13

Query Match      100.0%; Score 77; DB 3; Length 25;
Best Local Similarity 100.0%; Pred. No. 1.4e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RIQRGPGRAFTVIGK 15
Db      8 RIQRGPGRAFTVIGK 22
```

```
RESULT 101
US-08-447-515-31
; Sequence 31, Application US/08447515
; Patent No. 6162640
; GENERAL INFORMATION:
; APPLICANT: Wohlstadter, Jacob
; TITLE OF INVENTION: SELECTION METHODS
; NUMBER OF SEQUENCES: 31
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Curtis, Morris, & Safford
; ADDRESSEE: c/o Barry Evans
; STREET: 530 Fifth Avenue
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/447,515
; FILING DATE: 23-MAY-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/235,437
; FILING DATE: 29-APR-1994
; APPLICATION NUMBER: US 07/852,412
; FILING DATE: 16-MAR-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Evans, Barry
; REGISTRATION NUMBER: 22,802
; REFERENCE/DOCKET NUMBER: 370132-2000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 840-3333
; TELEFAX: (212) 840-0712
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 amino acids
; TYPE: amino acid
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; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-447-515-31

Query Match      100.0%; Score 77; DB 3; Length 25;
Best Local Similarity 100.0%; Pred. No. 1.4e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RIQRGPGRAFTVIGK 15
Db      8 RIQRGPGRAFTVIGK 22

RESULT 102
US-09-593-870A-31
; Sequence 31, Application US/09593870A
; Patent No. 6548643
; GENERAL INFORMATION:
; APPLICANT: McKenzie, Ian F.C.
; APPLICANT: Apostolopoulos, Vasso
; APPLICANT: Pietersz, Geoff Allan
; TITLE OF INVENTION: Antigen Carbohydrate Compounds and Their
; TITLE OF INVENTION: Use in Immunotherapy
; FILE REFERENCE: 2368-McKenzie
; CURRENT APPLICATION NUMBER: US/09/593,870A
; CURRENT FILING DATE: 2000-06-14
; PRIOR APPLICATION NUMBER: 09/223,043
; PRIOR FILING DATE: 1998-12-30
; NUMBER OF SEQ ID NOS: 69
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 31
; LENGTH: 25
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-593-870A-31
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Query Match      100.0%; Score 77; DB 4; Length 25;
Best Local Similarity 100.0%; Pred. No. 1.4e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RIQRGPGRAFTVIGK 15
Db      5 RIQRGPGRAFTVIGK 19

RESULT 103
US-08-455-625-12
; Sequence 12, Application US/08455625
; Patent No. 5932218
; GENERAL INFORMATION:
; APPLICANT: Berzofsky, Jay A.
; APPLICANT: Ahlers, Jeffrey D.
; APPLICANT: Pendleton, C. D.
; APPLICANT: Nara, Peter
; APPLICANT: Shirai, Mutsunori
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T
; TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolasch & Birch
; STREET: P.O. Box 747
; CITY: Falls Church
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22040-0747
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,625
; FILING DATE: 23-MAY-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/235,437
; FILING DATE: 29-APR-1994
; APPLICATION NUMBER: US 07/852,412
; FILING DATE: 16-MAR-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Evans, Barry
; REGISTRATION NUMBER: 22,802
; REFERENCE/DOCKET NUMBER: 370132-2000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 840-3333
; TELEFAX: (212) 840-0712
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 amino acids
; TYPE: amino acid
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/ FILING DATE:
/ CLASSIFICATION: 435
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/060,988
/ FILING DATE: 14-MAY-1993
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Svensson, Leonard R.
/ REGISTRATION NUMBER: 30330
/ REFERENCE/DOCKET NUMBER: 1173-434P
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 703-205-8000
/ TELEFAX: 703-205-8050
/ INFORMATION FOR SEQ ID NO: 12:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 15 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
/ FRAGMENT TYPE: Internal
/ FEATURE:
/ NAME/KEY: Peptide
/ LOCATION: 1..15
/ OTHER INFORMATION: /label= peptide
/ OTHER INFORMATION: /note= "p18-4, see Table v"
US-08-455-625-12

Query Match 96.1%; Score 74; DB 2; Length 15;
Best Local Similarity 93.3%; Pred. No. 2.5e-05;
Matches 14; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQKGPGRFVTVIGK 15
   |||:|||||
Db 1 RIQKGPGRFVTVIGK 15

RESULT 104
US-08-455-685-12
; Sequence 12, Application US/08455685
; Patent No. 6214347
; GENERAL INFORMATION:
; APPLICANT: Berzofsky, Jay A.
; APPLICANT: Ahlers, Jeffrey D.
; APPLICANT: Pendleton, C. David
; APPLICANT: Nara, Peter
; APPLICANT: Shirai, Mutsunori
; TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT
; TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND
; TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08455,685
; FILING DATE: 31-MAY-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/060,988
; FILING DATE: 14-MAY-1993
; APPLICATION NUMBER: 07/847,311
; FILING DATE: 06-MAR-1992
; APPLICATION NUMBER: 07/751,998
; FILING DATE: 29-AUG-1991
; APPLICATION NUMBER: 07/148,692
; FILING DATE: 26-JAN-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Beattie, Ingrid A.
; REGISTRATION NUMBER: P-42,306
; REFERENCE/DOCKET NUMBER: 08830/022001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617/542-5070
; TELEFAX: 617/542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: Internal
; FEATURE:
; NAME/KEY: Peptide
; LOCATION: 1..15
; OTHER INFORMATION: /label= peptide
; OTHER INFORMATION: /note= "p18-4, see Table v"
US-08-455-625-12

Query Match 96.1%; Score 74; DB 3; Length 15;
Best Local Similarity 93.3%; Pred. No. 2.5e-05;
Matches 14; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQKGPGRFVTVIGK 15
   |||:|||||
Db 1 RIQKGPGRFVTVIGK 15

RESULT 105
US-08-060-988A-12
; Sequence 12, Application US/08060988A
; Patent No. 6294322
; GENERAL INFORMATION:
; APPLICANT: Berzofsky, Jay A.
; APPLICANT: Ahlers, Jeffrey D.
; APPLICANT: Pendleton, C. David
; APPLICANT: Nara, Peter
; APPLICANT: Shirai, Mutsunori
; TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES
; TITLE OF INVENTION: THAT ELICIT
; TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND
; TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1
; NUMBER OF SEQUENCES: 48
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/060,988A
; FILING DATE: 14-MAY-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/847,311
; FILING DATE: 06-MAR-1992
; APPLICATION NUMBER: 07/751,998
; FILING DATE: 29-AUG-1991
; APPLICATION NUMBER: 07/148,692
; FILING DATE: 26-JAN-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Beattie, Ingrid A.
; REGISTRATION NUMBER: P-42,306
; REFERENCE/DOCKET NUMBER: 08830/022001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617/542-5070
; TELEFAX: 617/542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: Internal
; FEATURE:
; NAME/KEY: Peptide
; LOCATION: 1..15
; OTHER INFORMATION: /label= peptide
; OTHER INFORMATION: /note= "p18-4, see Table v"
US-08-455-625-12
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; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-08-060-988A-12

Query Match 96.1%; Score 74; DB 3; Length 15;  
Best Local Similarity 93.3%; Pred. No. 2.5e-05;  
Matches 14; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 RIQPGGRAFTVIGK 15  
|||:|||||  
Db 1 RIQPGGRAFTVIGK 15

## RESULT 106

PCT-US94-05142-12  
; Sequence 12, Application PC/TUS9405142  
; GENERAL INFORMATION:  
; APPLICANT: Berzofsky, Jay A.  
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; STREET: P.O. Box 747  
; CITY: Falls Church  
; STATE: Virginia  
; COUNTRY: USA  
; ZIP: 22040-0747  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION NUMBER: PCT/US94/05142  
; FILING DATE: 13-MAY-1994  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA: US 08/060,988  
; APPLICATION NUMBER: US 08/060,988  
; FILING DATE: 14-MAY-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Svensson, Leonard R.  
; REGISTRATION NUMBER: 30330  
; REFERENCE/DOCKET NUMBER: 1173-434P  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-205-8000  
; TELEFAX: 703-205-8050  
; INFORMATION FOR SEQ ID NO: 12:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; FRAGMENT TYPE: internal  
; FEATURE:  
; NAME/KEY: Peptide  
; LOCATION: 1..15  
; OTHER INFORMATION: /label= peptide  
; OTHER INFORMATION: /note= "p18-4, see Table V"  
PCT-US94-05142-12

Query Match 96.1%; Score 74; DB 5; Length 15;  
Best Local Similarity 93.3%; Pred. No. 2.5e-05;  
Matches 14; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 RIQPGGRAFTVIGK 15  
|||:|||||  
Db 1 RIQPGGRAFTVIGK 15

## RESULT 107

US-08-455-625-17  
; Sequence 17, Application US/08455625  
; Patent No. 5932218  
; GENERAL INFORMATION:  
; APPLICANT: Berzofsky, Jay A.  
; APPLICANT: Ahlers, Jeffrey D.  
; APPLICANT: Pendleton, C. D.  
; APPLICANT: Nara, Peter  
; APPLICANT: Shirai, Mutsunori  
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
; TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Birch, Stewart, Kolasch & Birch  
; STREET: P.O. Box 747  
; CITY: Falls Church  
; STATE: Virginia  
; COUNTRY: USA  
; ZIP: 22040-0747  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION NUMBER: US/08/455,625  
; FILING DATE:  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA: US 08/060,988  
; APPLICATION NUMBER: US 08/060,988  
; FILING DATE: 14-MAY-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Svensson, Leonard R.  
; REGISTRATION NUMBER: 30330  
; REFERENCE/DOCKET NUMBER: 1173-434P  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-205-8000  
; TELEFAX: 703-205-8050  
; INFORMATION FOR SEQ ID NO: 17:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; FRAGMENT TYPE: internal  
; FEATURE:  
; NAME/KEY: Peptide  
; LOCATION: 1..15  
; OTHER INFORMATION: /label= peptide  
; OTHER INFORMATION: /note= "p18-9, see Table V"  
US-08-455-625-17

Query Match 94.8%; Score 73; DB 2; Length 15;  
Best Local Similarity 93.3%; Pred. No. 3.6e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 RIQPGGRAFTVIGK 15  
|||:|||||  
Db 1 RIQPGGRAFTVIGK 15

## RESULT 108

US-08-455-625-23  
; Sequence 23, Application US/08455625  
; Patent No. 5932218  
; GENERAL INFORMATION:  
; APPLICANT: Berzofsky, Jay A.  
; APPLICANT: Ahlers, Jeffrey D.  
; APPLICANT: Pendleton, C. D.  
; APPLICANT: Nara, Peter  
; APPLICANT: Shirai, Mutsunori  
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT

```
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T
; TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolasch & Birch
; STREET: P.O. Box 747
; CITY: Falls Church
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22040-0747
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,625
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/060,988
; FILING DATE: 14-MAY-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Svensson, Leonard R.
; REGISTRATION NUMBER: 30330
; REFERENCE/DOCKET NUMBER: 1173-434P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-205-8000
; TELEFAX: 703-205-8050
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: internal
; FEATURE:
; NAME/KEY: Peptide
; LOCATION: 1..15
; OTHER INFORMATION: /label= peptide
; OTHER INFORMATION: /note= "P18-15, see Table V"
;
US-08-455-625-23

Query Match 94.8%; Score 73; DB 2; Length 15;
Best Local Similarity 93.3%; Pred. No. 3.6e-05;
Matches 14; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGGGFAFTIGK 15
Db 1 RIQGGGFAFTIGQ 15

RESULT 109
US-08-455-695-17
; Sequence 17, Application US/08455685
; Patent No. 6214347
; GENERAL INFORMATION:
; APPLICANT: Berzofsky, Jay A.
; APPLICANT: Ahlers, Jeffrey D.
; APPLICANT: Pendleton, C. David
; APPLICANT: Nara, Peter
; APPLICANT: Shirai, Mutsunori
; TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT
; TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND
; TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Dikette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,685
; FILING DATE: 31-MAY-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/060,988
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; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,685
; FILING DATE: 31-MAY-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/060,988
; FILING DATE: 14-MAY-1993
; APPLICATION NUMBER: 07/847,311
; FILING DATE: 06-MAR-1992
; APPLICATION NUMBER: 07/751,998
; FILING DATE: 29-AUG-1991
; APPLICATION NUMBER: 07/148,692
; FILING DATE: 26-JAN-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Beattie, Ingrid A.
; REGISTRATION NUMBER: P-42,306
; REFERENCE/DOCKET NUMBER: 08830/022003
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617/542-5070
; TELEFAX: 617/542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
;
US-08-455-685-17

Query Match 94.8%; Score 73; DB 3; Length 15;
Best Local Similarity 93.3%; Pred. No. 3.6e-05;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQGGGFAFTIGK 15
Db 1 RIQGGGFAFTIGK 15

RESULT 110
US-08-455-685-23
; Sequence 23, Application US/08455685
; Patent No. 6214347
; GENERAL INFORMATION:
; APPLICANT: Berzofsky, Jay A.
; APPLICANT: Ahlers, Jeffrey D.
; APPLICANT: Pendleton, C. David
; APPLICANT: Nara, Peter
; APPLICANT: Shirai, Mutsunori
; TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT
; TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND
; TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,685
; FILING DATE: 31-MAY-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/060,988
```

/ FILING DATE: 14-MAY-1993  
/ APPLICATION NUMBER: 07/847,311  
/ FILING DATE: 06-MAR-1992  
/ APPLICATION NUMBER: 07/751,998  
/ FILING DATE: 29-AUG-1991  
/ APPLICATION NUMBER: 07/148,692  
/ FILING DATE: 26-JAN-1988  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: Beattie, Ingrid A.  
/ REGISTRATION NUMBER: P-42,306  
/ REFERENCE/DOCKET NUMBER: 08830/022003  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: 617/542-5070  
/ TELEFAX: 617/542-8906  
/ TELEX: 200154  
/ INFORMATION FOR SEQ ID NO: 23:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 15 amino acids  
/ TYPE: amino acid  
/ TOPOLOGY: linear  
/ MOLECULE TYPE: peptide  
/ US-08-455-685-23

Query Match 94.8%; Score 73; DB 3; Length 15;  
Best Local Similarity 93.3%; Pred. No. 3.6e-05;  
Matches 14; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15  
DB 1 RIQRGPGRAFTVIGQ 15

## RESULT 111

US-08-060-988A-17  
Sequence 17, Application US/08060988A  
Patent No. 6294322  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES  
TITLE OF INVENTION: THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 48  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/060,988A  
FILING DATE: 14-MAY-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022001

/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: 617/542-5070  
/ TELEFAX: 617/542-8906  
/ TELEX: 200154  
/ INFORMATION FOR SEQ ID NO: 17:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 15 amino acids  
/ TYPE: amino acid  
/ TOPOLOGY: linear  
/ MOLECULE TYPE: peptide  
/ US-08-060-988A-17

Query Match 94.8%; Score 73; DB 3; Length 15;  
Best Local Similarity 93.3%; Pred. No. 3.6e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15  
DB 1 RIQRGPGRAFTVIGK 15

## RESULT 112

US-08-060-988A-23  
Sequence 23, Application US/08060988A  
Patent No. 6294322  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES  
TITLE OF INVENTION: THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 48  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/060,988A  
FILING DATE: 14-MAY-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 23:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-060-988A-23



Query Match 94.8%; Score 73; DB 3; Length 15;  
Best Local Similarity 93.3%; Pred. No. 3.6e-05;  
Matches 14; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTVIGK 15  
Db 1 RIQPGGRAFTVIGQ 15

## RESULT 113

PCT-US94-05142-17  
; Sequence 17, Application PC/TUS9405142  
; GENERAL INFORMATION:  
; APPLICANT:  
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
; TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESS: Birch, Stewart, Kolasch & Birch  
; STREET: P.O. Box 747  
; CITY: Falls Church  
; STATE: Virginia  
; COUNTRY: USA  
; ZIP: 22040-0747  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US94/05142  
; FILING DATE: 13-MAY-1994  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/060,988  
; FILING DATE: 14-MAY-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Svensson, Leonard R.  
; REGISTRATION NUMBER: 30330  
; REFERENCE/DOCKET NUMBER: 1173-434P  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-205-8050  
; TELEFAX: 703-205-8050  
; INFORMATION FOR SEQ ID NO: 17:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; FRAGMENT TYPE: internal  
; FEATURE:  
; NAME/KEY: Peptide  
; LOCATION: 1..15  
; OTHER INFORMATION: /label= peptide  
; OTHER INFORMATION: /note= "p18-9, see Table V"

PCT-US94-05142-17

Query Match 94.8%; Score 73; DB 5; Length 15;  
Best Local Similarity 93.3%; Pred. No. 3.6e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTVIGK 15  
Db 1 RIQPGGRAFTVIGQ 15

## RESULT 114

PCT-US94-05142-23  
; Sequence 23, Application PC/TUS9405142  
; GENERAL INFORMATION:  
; APPLICANT:

; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
; TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESS: Birch, Stewart, Kolasch & Birch  
; STREET: P.O. Box 747  
; CITY: Falls Church  
; STATE: Virginia  
; COUNTRY: USA  
; ZIP: 22040-0747  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US94/05142  
; FILING DATE: 13-MAY-1994  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/060,988  
; FILING DATE: 14-MAY-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Svensson, Leonard R.  
; REGISTRATION NUMBER: 30330  
; REFERENCE/DOCKET NUMBER: 1173-434P  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-205-8000  
; TELEFAX: 703-205-8050  
; INFORMATION FOR SEQ ID NO: 23:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; FRAGMENT TYPE: internal  
; FEATURE:  
; NAME/KEY: Peptide  
; LOCATION: 1..15  
; OTHER INFORMATION: /label= peptide  
; OTHER INFORMATION: /note= "p18-15, see Table V"

PCT-US94-05142-23

Query Match 94.8%; Score 73; DB 5; Length 15;  
Best Local Similarity 93.3%; Pred. No. 3.6e-05;  
Matches 14; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTVIGK 15  
Db 1 RIQPGGRAFTVIGQ 15

## RESULT 115

US-08-455-625-9  
; Sequence 9, Application US/08455625  
; Patent No. 5932218  
; GENERAL INFORMATION:

; APPLICANT: Berzofsky, Jay A.  
; APPLICANT: Ahlers, Jeffrey D.  
; APPLICANT: Pendleton, C. D.  
; APPLICANT: Nara, Peter  
; APPLICANT: Shirai, Mutsunori

; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
; TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESS: Birch, Stewart, Kolasch & Birch  
; STREET: P.O. Box 747  
; CITY: Falls Church  
; STATE: Virginia  
; COUNTRY: USA

ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,625  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 9:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..14  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "p18-1, see Table V"  
US-08-455-625-9

Query Match 93.5%; Score 72; DB 2; Length 14;  
Best Local Similarity 100.0%; Pred. No. 4.8e-05;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 IORGPGRAFTVIGK 15  
Db 1 IORGPGRAFTVIGK 14

## RESULT 116

US-08-455-685-9  
Sequence 9, Application US/08455685  
Patent No. 6214347  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTITERMINANT PEPTIDES THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 40  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,685  
FILING DATE: 31-MAY-1995  
PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/060,988  
FILING DATE: 14-MAY-1993  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022003  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 9:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-455-685-9

Query Match 93.5%; Score 72; DB 3; Length 14;  
Best Local Similarity 100.0%; Pred. No. 4.8e-05;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 IORGPGRAFTVIGK 15  
Db 1 IORGPGRAFTVIGK 14

## RESULT 117

US-08-060-988A-9  
Sequence 9, Application US/08060988A  
Patent No. 6294322  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTITERMINANT PEPTIDES  
TITLE OF INVENTION: THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 48  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/060,988A  
FILING DATE: 14-MAY-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306

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; REFERENCE/DOCKET NUMBER: 08830/022001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617/542-5070
; TELEFAX: 617/542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 14 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; PCT-US94-05142-9

Query Match          93.5%; Score 72; DB 3; Length 14;
Best Local Similarity 100.0%; Pred. No. 4.8e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      2 IQRGPGRAFTVIGK 15
Db      1 IQRGPGRAFTVIGK 14

RESULT 118
PCT-US94-05142-9
; Sequence 9, Application PC/TUS9405142
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T
; TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolasch & Birch
; STREET: P.O. Box 747
; CITY: Falls Church
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22040-0747
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/05142
; FILING DATE: 13-MAY-1994
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/060,988
; FILING DATE: 14-MAY-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Svensson, Leonard R.
; REGISTRATION NUMBER: 30330
; REFERENCE/DOCKET NUMBER: 1173-434P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-205-8000
; TELEFAX: 703-205-8050
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 14 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: internal
; FEATURE:
; NAME/KEY: Peptide
; LOCATION: 1..14
; OTHER INFORMATION: /label= peptide
; OTHER INFORMATION: /note= "p18-1, see Table V"
; PCT-US94-05142-9

Query Match          93.5%; Score 72; DB 5; Length 14;
Best Local Similarity 100.0%; Pred. No. 4.8e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      2 IQRGPGRAFTVIGK 15
Db      1 IQRGPGRAFTVIGK 14

us-08-060-988A-9

RESULT 119
PCT-US95-03236-29
; Sequence 29, Application PC/TUS9503236
; GENERAL INFORMATION:
; APPLICANT: University of Southern California
; TITLE OF INVENTION: Methods to Diagnose and Treat HIV-1
; TITLE OF INVENTION: Infection
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Campbell and Flores
; STREET: 4370 La Jolla Village Drive, Suite 700
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92122
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/03236
; FILING DATE: 13-MAR-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Imbra, Richard J.
; REGISTRATION NUMBER: 37,643
; REFERENCE/DOCKET NUMBER: FP-SI 1394
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 535-9001
; TELEFAX: (619) 535-8949
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 14 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; PCT-US95-03236-29

Query Match          93.5%; Score 72; DB 5; Length 14;
Best Local Similarity 100.0%; Pred. No. 4.8e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 RIQRGPGRAFTVIG 14
Db      1 RIQRGPGRAFTVIG 14

us-08-060-988A-9

RESULT 120
PCT-US95-03236-52
; Sequence 52, Application PC/TUS9503236
; GENERAL INFORMATION:
; APPLICANT: University of Southern California
; TITLE OF INVENTION: Methods to Diagnose and Treat HIV-1
; TITLE OF INVENTION: Infection
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Campbell and Flores
; STREET: 4370 La Jolla Village Drive, Suite 700
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92122
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
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; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/03236
; FILING DATE: 13-MAR-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Imbra, Richard J.
; REGISTRATION NUMBER: 37,643
; REFERENCE/DOCKET NUMBER: FP-SI 1394
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 535-9001
; TELEFAX: (619) 535-8949
; INFORMATION FOR SEQ ID NO: 52:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 14 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
PCT-US95-03236-52

Query Match          93.5%; Score 72; DB 5; Length 14;
Best Local Similarity 100.0%; Pred. No. 4.8e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 RIQRGPGRAFTVIG 14
Db 1 RIQRGPGRAFTVIG 14

RESULT 121
US-08-704-170-72
; Sequence 72, Application US/08704170
; Patent No. 5707626
; GENERAL INFORMATION:
; APPLICANT: Douvas, Angeline
; APPLICANT: Takehana, Yoshi
; APPLICANT: Ehresmann, Glenn
; TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR
; TITLE OF INVENTION: IMMUNOINFECTIVE CLUSTER VIRUS INFECTIONS
; NUMBER OF SEQUENCES: 121
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Robbins, Berliner & Carson
; STREET: 201 No. 5707626th Figueroa Street, Suite 500
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90012
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/704,170
; FILING DATE:
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/029,850
; FILING DATE: 11-MAR-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Spitals, John P.
; REGISTRATION NUMBER: 29,215
; REFERENCE/DOCKET NUMBER: 1920-331
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 977-1001
; TELEFAX: (213) 977-1003
; INFORMATION FOR SEQ ID NO: 72:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide

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US-08-704-170-72
Query Match          93.5%; Score 72; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 5.2e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 RIQRGPGRAFTVIG 14
Db 2 RIQRGPGRAFTVIG 15

RESULT 122
US-08-455-625-19
; Sequence 19, Application US/08455625
; Patent No. 5932218
; GENERAL INFORMATION:
; APPLICANT: Berzofsky, Jay A.
; APPLICANT: Ahlers, Jeffrey D.
; APPLICANT: Pendleton, C. D.
; APPLICANT: Nara, Peter
; APPLICANT: Shirai, Mutsunori
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T
; TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolasch & Birch
; STREET: P.O. Box 747
; CITY: Falls Church
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22040-0747
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,625
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/060,988
; FILING DATE: 14-MAY-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Svensson, Leonard R.
; REGISTRATION NUMBER: 30330
; REFERENCE/DOCKET NUMBER: 1173-434P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-205-8000
; TELEFAX: 703-205-8050
; INFORMATION FOR SEQ ID NO: 19:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: internal
; FEATURE:
; NAME/KEY: Peptide
; LOCATION: 1..15
; OTHER INFORMATION: /label=peptide
; OTHER INFORMATION: /note="p18-11, see Table v"
US-08-455-625-19

Query Match          93.5%; Score 72; DB 2; Length 15;
Best Local Similarity 93.3%; Pred. No. 5.2e-05;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 1 RIQRGPGRAFTVIG 15
Db 1 RIQRGPGRAFTVIG 15

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RESULT 123  
US-08-455-625-20  
; Sequence 20, Application US/08455625  
; Patent No. 5932218  
; GENERAL INFORMATION:  
; APPLICANT: Berzofsky, Jay A.  
; APPLICANT: Ahlers, Jeffrey D.  
; APPLICANT: Pendleton, C. D.  
; APPLICANT: Nara, Peter  
; APPLICANT: Shirai, Mutsunori  
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Birch, Stewart, Kolasch & Birch  
; STREET: P.O. Box 747  
; CITY: Falls Church  
; STATE: Virginia  
; COUNTRY: USA  
; ZIP: 22040-0747  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/455,625  
; FILING DATE:  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/060,988  
; FILING DATE: 14-MAY-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Svensson, Leonard R.  
; REGISTRATION NUMBER: 30330  
; REFERENCE/DOCKET NUMBER: 1173-434P  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-205-8000  
; TELEFAX: 703-205-8050  
; INFORMATION FOR SEQ ID NO: 20:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; FRAGMENT TYPE: internal  
; FEATURE:  
; NAME/KEY: Peptide  
; LOCATION: 1..15  
; OTHER INFORMATION: /label= peptide  
; OTHER INFORMATION: /note= "p18-12, see Table V"  
US-08-455-625-20  
Query Match 93.5%; Score 72; DB 2; Length 15;  
Best Local Similarity 93.3%; Pred. No. 5.2e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1 RIQRGPGRAFTVIGK 15  
Db 1 RIQRGPGRAFTVIGK 15  
RESULT 124  
US-08-455-625-21  
; Sequence 21, Application US/08455625  
; Patent No. 5932218  
; GENERAL INFORMATION:  
; APPLICANT: Berzofsky, Jay A.  
; APPLICANT: Ahlers, Jeffrey D.  
; APPLICANT: Pendleton, C. D.  
; APPLICANT: Nara, Peter  
; TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT  
; TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T-LYMPHOCYTE AND  
; NUMBER OF SEQUENCES: 40  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Fish & Richardson P.C.  
; STREET: 225 Franklin Street  
; CITY: Boston  
; STATE: MA

; APPLICANT: Shirai, Mutsunori  
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Birch, Stewart, Kolasch & Birch  
; STREET: P.O. Box 747  
; CITY: Falls Church  
; STATE: Virginia  
; COUNTRY: USA  
; ZIP: 22040-0747  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/455,625  
; FILING DATE:  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/060,988  
; FILING DATE: 14-MAY-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Svensson, Leonard R.  
; REGISTRATION NUMBER: 30330  
; REFERENCE/DOCKET NUMBER: 1173-434P  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-205-8000  
; TELEFAX: 703-205-8050  
; INFORMATION FOR SEQ ID NO: 21:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; FRAGMENT TYPE: internal  
; FEATURE:  
; NAME/KEY: Peptide  
; LOCATION: 1..15  
; OTHER INFORMATION: /label= peptide  
; OTHER INFORMATION: /note= "p18-13, see Table V"  
US-08-455-625-21  
Query Match 93.5%; Score 72; DB 2; Length 15;  
Best Local Similarity 93.3%; Pred. No. 5.2e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1 RIQRGPGRAFTVIGK 15  
Db 1 RIQRGPGRAFTVIGK 15  
RESULT 125  
US-08-455-685-19  
; Sequence 19, Application US/08455685  
; Patent No. 6214347  
; GENERAL INFORMATION:  
; APPLICANT: Berzofsky, Jay A.  
; APPLICANT: Ahlers, Jeffrey D.  
; APPLICANT: Pendleton, C. David  
; APPLICANT: Nara, Peter  
; APPLICANT: Shirai, Mutsunori  
; TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT  
; TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T-LYMPHOCYTE AND  
; NUMBER OF SEQUENCES: 40  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Fish & Richardson P.C.  
; STREET: 225 Franklin Street  
; CITY: Boston  
; STATE: MA

```

PRIOR APPLICATION DATA:
  APPLICATION NUMBER: 08/060,988
  FILING DATE: 14-MAY-1993
  APPLICATION NUMBER: 07/847,311
  FILING DATE: 06-MAR-1992
  APPLICATION NUMBER: 07/751,998
  FILING DATE: 29-AUG-1991
  APPLICATION NUMBER: 07/148,692
  FILING DATE: 26-JAN-1988
ATTORNEY/AGENT INFORMATION:
  NAME: Beattie, Ingrid A.
  REGISTRATION NUMBER: P-42,306
REFERENCE/DOCKET NUMBER: 08830/022003
TELECOMMUNICATION INFORMATION:
  TELEPHONE: 617/542-5070
  TELEFAX: 617/542-8906
  TELEX: 200154
INFORMATION FOR SEQ ID NO: 20:
  SEQUENCE CHARACTERISTICS:
    LENGTH: 15 amino acids
    TYPE: amino acid
    TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-455-685-20

Query Match          93.5%; Score 72; DB 3; Length 15;
Best Local Similarity 93.3%; Pred. No. 5.2e-05;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0

QY      1 RIQRGPGRAFWTIGK 15
DDB     |||||
        1 RIQRGPGRAFWAIGK 15

RESULT 127
US-08-455-685-21
Sequence 21, Application US/08455685
Patent No. 6214347
GENERAL INFORMATION:
APPLICANT: Berzofsky, Jay A.
APPLICANT: Ahlers, Jeffrey D.
APPLICANT: Pendleton, C. David
APPLICANT: Nara, Peter
APPLICANT: Shirai, Mitsunori
TITLE OF INVENTION: MULTITERMINANT PEPTIDES THAT ELICIT
HELPFUL OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1
NUMBER OF SEQUENCES: 40
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/455,685
FILING DATE: 31-MAY-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/060,988
FILING DATE: 14-MAY-1993
APPLICATION NUMBER: 07/847,311
FILING DATE: 06-MAR-1992
APPLICATION NUMBER: 07/751,998
FILING DATE: 29-AUG-1991
APPLICATION NUMBER: 07/148,692
FILING DATE: 26-JAN-1988
ATTORNEY/AGENT INFORMATION:

```

```
; NAME: Beattie, Ingrid A.
; REGISTRATION NUMBER: P-42,306
; REFERENCE/DOCKET NUMBER: 08830/022003
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617/542-5070
; TELEFAX: 617/542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 21:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-455-685-21

Query Match          93.5%; Score 72; DB 3; Length 15;
Best Local Similarity 93.3%; Pred. No. 5.2e-05;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQGPGRFAVTVIGK 15
   |||||
Db 1 RIQGPGRFAVTVIGK 15

RESULT 128
US-08-060-988A-19
; Sequence 19, Application US/08060988A
; Patent No. 6294322
; GENERAL INFORMATION:
; APPLICANT: Berzofsky, Jay A.
; APPLICANT: Ahlers, Jeffrey D.
; APPLICANT: Pendleton, C. David
; APPLICANT: Nara, Peter
; APPLICANT: Shirai, Mutsunori
; TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES
; TITLE OF INVENTION: THAT ELICIT
; TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND
; TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1
; NUMBER OF SEQUENCES: 48
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/060,988A
; FILING DATE: 14-MAY-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/847,311
; FILING DATE: 06-MAR-1992
; APPLICATION NUMBER: 07/751,998
; FILING DATE: 29-AUG-1991
; APPLICATION NUMBER: 07/148,692
; FILING DATE: 26-JAN-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Beattie, Ingrid A.
; REGISTRATION NUMBER: P-42,306
; REFERENCE/DOCKET NUMBER: 08830/022001
; TELEPHONE: 617/542-5070
; TELEFAX: 617/542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 19:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-455-685-21

Query Match          93.5%; Score 72; DB 3; Length 15;
Best Local Similarity 93.3%; Pred. No. 5.2e-05;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQGPGRFAVTVIGK 15
   |||||
Db 1 RIQGPGRFAVTVIGK 15
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; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-060-988A-19

Query Match          93.5%; Score 72; DB 3; Length 15;
Best Local Similarity 93.3%; Pred. No. 5.2e-05;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQGPGRFAVTVIGK 15
   |||||
Db 1 RIQGPGRFAVTVIGK 15

RESULT 129
US-08-060-988A-20
; Sequence 20, Application US/08060988A
; Patent No. 6294322
; GENERAL INFORMATION:
; APPLICANT: Berzofsky, Jay A.
; APPLICANT: Ahlers, Jeffrey D.
; APPLICANT: Pendleton, C. David
; APPLICANT: Nara, Peter
; APPLICANT: Shirai, Mutsunori
; TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES
; TITLE OF INVENTION: THAT ELICIT
; TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND
; TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1
; NUMBER OF SEQUENCES: 48
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/060,988A
; FILING DATE: 14-MAY-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/847,311
; FILING DATE: 06-MAR-1992
; APPLICATION NUMBER: 07/751,998
; FILING DATE: 29-AUG-1991
; APPLICATION NUMBER: 07/148,692
; FILING DATE: 26-JAN-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Beattie, Ingrid A.
; REGISTRATION NUMBER: P-42,306
; REFERENCE/DOCKET NUMBER: 08830/022001
; TELEPHONE: 617/542-5070
; TELEFAX: 617/542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 20:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-060-988A-20

Query Match          93.5%; Score 72; DB 3; Length 15;
Best Local Similarity 93.3%; Pred. No. 5.2e-05;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQGPGRFAVTVIGK 15
   |||||
Db 1 RIQGPGRFAVTVIGK 15
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RESULT 130  
US-08-060-988A-21  
; Sequence 21, Application US/08060988A  
; Patent No. 6294322  
; GENERAL INFORMATION:  
; APPLICANT: Berzofsky, Jay A.  
; APPLICANT: Ahlers, Jeffrey D.  
; APPLICANT: Pendleton, C. David  
; APPLICANT: Nara, Peter  
; APPLICANT: Shirai, Mutsunori  
; TITLE OF INVENTION: MULTITERMINANT PEPTIDES  
; TITLE OF INVENTION: THAT ELICIT  
; TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
; TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
; NUMBER OF SEQUENCES: 48  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Fieh & Richardson P.C.  
; STREET: 225 Franklin Street  
; CITY: Boston  
; STATE: MA  
; COUNTRY: US  
; ZIP: 02110-2804  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; OPERATING SYSTEM: Windows95  
; SOFTWARE: FastSeq for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/060,988A  
; FILING DATE: 14-MAY-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 07/847,311  
; FILING DATE: 06-MAR-1992  
; APPLICATION NUMBER: 07/751,998  
; FILING DATE: 29-AUG-1991  
; APPLICATION NUMBER: 07/148,692  
; FILING DATE: 26-JAN-1988  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Beattie, Ingrid A.  
; REGISTRATION NUMBER: P-42,306  
; REFERENCE/DOCKET NUMBER: 08830/022001  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617/542-5070  
; TELEFAX: 617/542-8906  
; TELEX: 200154  
; INFORMATION FOR SEQ ID NO: 21:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-08-060-988A-21  
Query Match 93.5%; Score 72; DB 3; Length 15;  
Best Local Similarity 93.3%; Pred. No. 5.2e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1 RIQRGPGRAFVTGK 15  
DB 1 RIQRGPGRAFVTGK 15  
RESULT 131  
PCT-US94-02631-72  
; Sequence 72, Application PC/TUS9402631  
; GENERAL INFORMATION:  
; APPLICANT: Douvas, Angeline  
; APPLICANT: Takehana, Yoshi  
; APPLICANT: Ehresmann, Glenn  
; TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
; TITLE OF INVENTION: IMMUNOINFECTIVE CLUSTER VIRUS INFECTIONS  
; NUMBER OF SEQUENCES: 121  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Robbins, Berliner & Carson  
; STREET: 201 North Figueroa Street, Suite 500  
; CITY: Los Angeles  
; STATE: California  
; COUNTRY: U.S.A.  
; ZIP: 90012  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US94/02631  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/029,850  
; FILING DATE: 11-MAR-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Spitals, John P.  
; REGISTRATION NUMBER: 29,215  
; REFERENCE/DOCKET NUMBER: 1920-331  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (213) 977-1001  
; TELEFAX: (213) 977-1003  
; INFORMATION FOR SEQ ID NO: 72:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
PCT-US94-02631-72  
Query Match 93.5%; Score 72; DB 5; Length 15;  
Best Local Similarity 100.0%; Pred. No. 5.2e-05;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RIQRGPGRAFVTIG 14  
DB 2 RIQRGPGRAFVTIG 15  
RESULT 132  
PCT-US94-05142-19  
; Sequence 19, Application PC/TUS9405142  
; GENERAL INFORMATION:  
; APPLICANT:  
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
; TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Birch, Stewart, Kolasch & Birch  
; STREET: P.O. Box 747  
; CITY: Falls Church  
; STATE: Virginia  
; COUNTRY: USA  
; ZIP: 22040-0747  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US94/05142  
; FILING DATE: 13-MAY-1994  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/060,988  
; FILING DATE: 14-MAY-1993  
; ATTORNEY/AGENT INFORMATION:



; NAME: Svensson, Leonard R.  
; REGISTRATION NUMBER: 30330  
; REFERENCE/DOCKET NUMBER: 1173-434P  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-205-8000  
; TELEFAX: 703-205-8050  
; INFORMATION FOR SEQ ID NO: 19:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; FRAGMENT TYPE: internal  
; FEATURE:  
; NAME/KEY: Peptide  
; LOCATION: 1..15  
; OTHER INFORMATION: /label= peptide  
; OTHER INFORMATION: /note= "p18-11, see Table V"  
PCT-US94-05142-19

Query Match 93.5%; Score 72; DB 5; Length 15;  
Best Local Similarity 93.3%; Pred. No. 5.2e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQRPGRFVTIGK 15  
|||  
Db 1 RIQRPGRFVTIGK 15

RESULT 133  
PCT-US94-05142-20  
; Sequence 20, Application PC/TUS9405142  
; GENERAL INFORMATION:  
; APPLICANT:  
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
; TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Birch, Stewart, Kolasch & Birch  
; STREET: P.O. Box 747  
; CITY: Falls Church  
; STATE: Virginia  
; COUNTRY: USA  
; ZIP: 22040-0747  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; FILING DATE: 13-MAY-1994  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/060,988  
; FILING DATE: 14-MAY-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Svensson, Leonard R.  
; REGISTRATION NUMBER: 30330  
; REFERENCE/DOCKET NUMBER: 1173-434P  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-205-8000  
; TELEFAX: 703-205-8050  
; INFORMATION FOR SEQ ID NO: 20:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; FRAGMENT TYPE: internal  
; FEATURE:  
; NAME/KEY: Peptide

; LOCATION: 1..15  
; OTHER INFORMATION: /label= peptide  
; OTHER INFORMATION: /note= "p18-12, see Table V"  
PCT-US94-05142-20

Query Match 93.5%; Score 72; DB 5; Length 15;  
Best Local Similarity 93.3%; Pred. No. 5.2e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQRPGRFVTIGK 15  
|||  
Db 1 RIQRPGRFVTIGK 15

RESULT 134  
PCT-US94-05142-21  
; Sequence 21, Application PC/TUS9405142  
; GENERAL INFORMATION:  
; APPLICANT:  
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
; TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Birch, Stewart, Kolasch & Birch  
; STREET: P.O. Box 747  
; CITY: Falls Church  
; STATE: Virginia  
; COUNTRY: USA  
; ZIP: 22040-0747  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US94/05142  
; FILING DATE: 13-MAY-1994  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/060,988  
; FILING DATE: 14-MAY-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Svensson, Leonard R.  
; REGISTRATION NUMBER: 30330  
; REFERENCE/DOCKET NUMBER: 1173-434P  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-205-8000  
; TELEFAX: 703-205-8050  
; INFORMATION FOR SEQ ID NO: 21:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; FRAGMENT TYPE: internal  
; FEATURE:  
; NAME/KEY: Peptide  
; LOCATION: 1..15  
; OTHER INFORMATION: /label= peptide  
; OTHER INFORMATION: /note= "p18-13, see Table V"  
PCT-US94-05142-21

Query Match 93.5%; Score 72; DB 5; Length 15;  
Best Local Similarity 93.3%; Pred. No. 5.2e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQRPGRFVTIGK 15  
|||  
Db 1 RIQRPGRFVTIGK 15

RESULT 135

US-08-257-528B-35  
; Sequence 35, Application US/08257528B  
; Patent No. 5639854  
; GENERAL INFORMATION:  
; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; APPLICANT: KLEIN, Michel H.  
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
; NUMBER OF SEQUENCES: 101  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: Suite 701, 330 University Avenue  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: M5G 1R7  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/257,528B  
; FILING DATE: 09-JUN-1994  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: STEWART, MICHAEL I.  
; REGISTRATION NUMBER: 24,973  
; REFERENCE/DOCKET NUMBER: 1038-336 MIS:jb  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 595-1155  
; TELEFAX: (416) 595-1163  
; INFORMATION FOR SEQ ID NO: 35:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 17 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-257-528B-35

Query Match 93.5%; Score 72; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 5.8e-05;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGPAFTVIG 14  
Db 4 RIQPGGPAFTVIG 17

RESULT 136  
US-08-460-602A-35  
; Sequence 35, Application US/08460602A  
; Patent No. 5759769  
; GENERAL INFORMATION:  
; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; APPLICANT: KLEIN, Michel H.  
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
; NUMBER OF SEQUENCES: 101  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: Suite 701, 330 University Avenue  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: M5G 1R7  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/460,602A

; FILING DATE: 02-JUN-1995  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/257,528  
; FILING DATE: 09-JUN-1994  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/073,378  
; FILING DATE: 09-JUN-1993  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: STEWART, MICHAEL I.  
; REGISTRATION NUMBER: 24,973  
; REFERENCE/DOCKET NUMBER: 1038-450 MIS:jb  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 595-1155  
; TELEFAX: (416) 595-1163  
; INFORMATION FOR SEQ ID NO: 35:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 17 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-460-602A-35

Query Match 93.5%; Score 72; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 5.8e-05;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGPAFTVIG 14  
Db 4 RIQPGGPAFTVIG 17

RESULT 137  
US-08-463-966A-35  
; Sequence 35, Application US/08463966A  
; Patent No. 5795955  
; GENERAL INFORMATION:  
; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; APPLICANT: KLEIN, Michel H.  
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
; NUMBER OF SEQUENCES: 101  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: Suite 701, 330 University Avenue  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: M5G 1R7  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/463,966A  
; FILING DATE: 05-JUN-1995  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/257,528  
; FILING DATE: 09-JUN-1994  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/073,378  
; FILING DATE: 09-JUN-1993  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: STEWART, MICHAEL I.  
; REGISTRATION NUMBER: 24,973  
; REFERENCE/DOCKET NUMBER: 1038-487 MIS:jb  
; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (416) 595-1155  
; TELEFAX: (416) 595-1163  
; INFORMATION FOR SEQ ID NO: 35:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 17 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-463-966A-35

Query Match 93.5%; Score 72; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 5.8e-05;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RIQGPGRFVTIG 14  
DB 4 RIQGPGRFVTIG 17

## RESULT 138

US-08-465-217A-35  
; Sequence 35, Application US/08465217A  
; Patent No. 5800822  
; GENERAL INFORMATION:

; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; APPLICANT: KLEIN, Michel H.  
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
; NUMBER OF SEQUENCES: 101  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: Suite 701, 330 University Avenue  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: MSG 1R7

; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/465,217A  
; FILING DATE: 05-JUN-1995  
; CLASSIFICATION: 424

; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/257,528  
; FILING DATE: 09-JUN-1994  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/073,378  
; FILING DATE: 09-JUN-1993  
; CLASSIFICATION: 424

; ATTORNEY/AGENT INFORMATION:  
; NAME: STEWART, MICHAEL I.  
; REGISTRATION NUMBER: 24,973  
; REFERENCE/DOCKET NUMBER: 1038-486 MIS:jfb  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 595-1155  
; TELEFAX: (416) 595-1163  
; INFORMATION FOR SEQ ID NO: 35:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 17 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-465-217A-35

Query Match 93.5%; Score 72; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 5.8e-05;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RIQGPGRFVTIG 14

DB 4 RIQGPGRFVTIG 17

## RESULT 139

US-08-464-329A-35  
; Sequence 35, Application US/08464329A  
; Patent No. 5817754  
; GENERAL INFORMATION:

; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; APPLICANT: KLEIN, Michel H.  
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
; NUMBER OF SEQUENCES: 101  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: Suite 701, 330 University Avenue  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: MSG 1R7

; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/464,329A  
; FILING DATE: 05-JUN-1995  
; CLASSIFICATION: 424

; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/257,528  
; FILING DATE: 09-JUN-1994  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/073,378  
; FILING DATE: 09-JUN-1993  
; CLASSIFICATION: 424

; ATTORNEY/AGENT INFORMATION:  
; NAME: STEWART, MICHAEL I.  
; REGISTRATION NUMBER: 24,973  
; REFERENCE/DOCKET NUMBER: 1038-449 MIS:jfb  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 595-1155  
; TELEFAX: (416) 595-1163  
; INFORMATION FOR SEQ ID NO: 35:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 17 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-464-329A-35

Query Match 93.5%; Score 72; DB 2; Length 17;  
Best Local Similarity 100.0%; Pred. No. 5.8e-05;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RIQGPGRFVTIG 14  
DB 4 RIQGPGRFVTIG 17

## RESULT 140

US-08-462-507A-35  
; Sequence 35, Application US/08462507A  
; Patent No. 5876731  
; GENERAL INFORMATION:

; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; APPLICANT: KLEIN, Michel H.  
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
; NUMBER OF SEQUENCES: 101  
; CORRESPONDENCE ADDRESS:

```
;
; ADDRESSEE: Sim & McBurney
; STREET: Suite 701, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5G 1R7
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/462,507A
; FILING DATE: 05-JUN-1995
; CLASSIFICATION: 424
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/073,378
; FILING DATE: 09-JUN-1994
; CLASSIFICATION: 424
;
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, MICHAEL I.
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-451 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 35:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 17 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
; US-08-462-507A-35
;
; Query Match 93.5%; Score 72; DB 2; Length 17;
; Best Local Similarity 100.0%; Pred. No. 5.8e-05;
; Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
;
; QY 1 RIQGGGGRFVTVIG 14
; Db 4 RIQGGGGRFVTVIG 17
;
; RESULT 141
; US-08-467-881A-35
; Sequence 35, Application US/08467881A
; Patent No. 5951986
; GENERAL INFORMATION:
; APPLICANT: SIA, Charles D.Y.
; APPLICANT: CHONG, Pele
; APPLICANT: KLEIN, Michel H.
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides
; NUMBER OF SEQUENCES: 101
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: Suite 701, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5G 1R7
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/467,881A
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 424
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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/257,528
; FILING DATE: 09-JUN-1994
; CLASSIFICATION: 424
;
; PRIOR APPLICATION DATA: 08/073,378
; FILING DATE: 09-JUN-1993
; CLASSIFICATION: 424
;
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, MICHAEL I.
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-488 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 35:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 17 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
; US-08-467-881A-35
;
; Query Match 93.5%; Score 72; DB 2; Length 17;
; Best Local Similarity 100.0%; Pred. No. 5.8e-05;
; Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
;
; QY 1 RIQGGGGRFVTVIG 14
; Db 4 RIQGGGGRFVTVIG 17
;
; RESULT 142
; PCT-US92-06688-13
; Sequence 13, Application PC/TUS9206688
; GENERAL INFORMATION:
; APPLICANT: REPLIGEN CORPORATION
; APPLICANT: THE ROCKFELLER UNIVERSITY
; TITLE OF INVENTION: MULTIPLE ANTIGEN PEPTIDES FOR USE AS HIV
; NUMBER OF SEQUENCES: 21
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: U.S.A.
; ZIP: 02110-2804
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; COMPUTER: IBM PS/2 Model 50Z or 55SX
; OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
; SOFTWARE: WordPerfect (Version 5.1)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US92/06688
; FILING DATE: 19920811
; CLASSIFICATION: 424
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 744,281
; FILING DATE: 13 August 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Paul T. Clark
; REGISTRATION NUMBER: 30,162
; REFERENCE/DOCKET NUMBER: 00231/052W01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 542-5070
; TELEFAX: (617) 542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 17
; TYPE: AMINO ACID
; TOPOLOGY: linear
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APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,625  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 15:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "p18-7, see Table v"  
US-08-455-625-15  
Query Match 92.2%; Score 71; DB 2; Length 15;  
Best Local Similarity 93.3%; Pred. No. 7.4e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 1 RIQGGPARAFVTIGK 15  
Db 1 RIQGGPARAFVTIGK 15  
RESULT 146  
US-08-455-625-16  
Sequence 16, Application US/08455625  
Patent No. 5932218  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. D.  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia

COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,625  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 16:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "p18-8, see Table v"  
US-08-455-625-16  
Query Match 92.2%; Score 71; DB 2; Length 15;  
Best Local Similarity 93.3%; Pred. No. 7.4e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 1 RIQGGPARAFVTIGK 15  
Db 1 RIQGGPARAFVTIGK 15  
RESULT 147  
US-08-455-625-18  
Sequence 18, Application US/08455625  
Patent No. 5932218  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. D.  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,625  
FILING DATE:

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/ CLASSIFICATION: 435
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/060,988
/ FILING DATE: 14-MAY-1993
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Svensson, Leonard R.
/ REGISTRATION NUMBER: 30330
/ REFERENCE/DOCKET NUMBER: 1173-434P
/ TELEPHONE: 703-205-8000
/ TELEFAX: 703-205-8050
/ INFORMATION FOR SEQ ID NO: 18:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 15 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
/ FRAGMENT TYPE: internal
/ FEATURE:
/ NAME/KEY: Peptide
/ LOCATION: 1..15
/ OTHER INFORMATION: /label= peptide
/ OTHER INFORMATION: /note= "p18-10, see Table V"
/ US-08-455-625-18

Query Match 92.2%; Score 71; DB 2; Length 15;
Best Local Similarity 93.3%; Pred. No. 7.4e-05;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTVIGK 15
Db 1 RIQPGGRAFTVIGK 15

RESULT 148
US-08-455-625-22
/ Sequence 22, Application US/08455625
/ Patent No. 5932218
/ GENERAL INFORMATION:
/ APPLICANT: Berzofsky, Jay A.
/ APPLICANT: Ahlers, Jeffrey D.
/ APPLICANT: Pendleton, C. D.
/ APPLICANT: Nara, Peter
/ APPLICANT: Shirai, Mutsunori
/ TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT
/ TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T
/ TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV
/ NUMBER OF SEQUENCES: 36
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Birch, Stewart, Kolasch & Birch
/ STREET: P.O. Box 747
/ CITY: Falls Church
/ STATE: Virginia
/ COUNTRY: USA
/ ZIP: 22040-0747
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patent In Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA:
/ FILING DATE:
/ APPLICATION NUMBER: US/08/455,625
/ FILING DATE:
/ CLASSIFICATION: 435
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/060,988
/ FILING DATE: 14-MAY-1993
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Svensson, Leonard R.
/ REGISTRATION NUMBER: 30330
/ REFERENCE/DOCKET NUMBER: 1173-434P
/ TELEPHONE: 703-205-8000

/ TELEFAX: 703-205-8050
/ INFORMATION FOR SEQ ID NO: 22:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 15 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
/ FRAGMENT TYPE: internal
/ FEATURE:
/ NAME/KEY: Peptide
/ LOCATION: 1..15
/ OTHER INFORMATION: /label= peptide
/ OTHER INFORMATION: /note= "p18-14, see Table V"
/ US-08-455-625-22

Query Match 92.2%; Score 71; DB 2; Length 15;
Best Local Similarity 93.3%; Pred. No. 7.4e-05;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTVIGK 15
Db 1 RIQPGGRAFTVIGK 15

RESULT 149
US-08-455-685-11
/ Sequence 11, Application US/08455685
/ Patent No. 6214347
/ GENERAL INFORMATION:
/ APPLICANT: Berzofsky, Jay A.
/ APPLICANT: Ahlers, Jeffrey D.
/ APPLICANT: Pendleton, C. David
/ APPLICANT: Nara, Peter
/ APPLICANT: Shirai, Mutsunori
/ TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT
/ TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND
/ TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1
/ NUMBER OF SEQUENCES: 40
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Fish & Richardson P.C.
/ STREET: 225 Franklin Street
/ CITY: Boston
/ STATE: MA
/ COUNTRY: US
/ ZIP: 02110-2804
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Diskette
/ COMPUTER: IBM Compatible
/ OPERATING SYSTEM: Windows95
/ SOFTWARE: FastSeq for Windows Version 2.0
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/455,685
/ FILING DATE: 31-MAY-1995
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 08/060,988
/ FILING DATE: 14-MAY-1993
/ APPLICATION NUMBER: 07/847,311
/ FILING DATE: 06-MAR-1992
/ APPLICATION NUMBER: 07/751,998
/ FILING DATE: 29-AUG-1991
/ APPLICATION NUMBER: 07/148,692
/ FILING DATE: 26-JAN-1988
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Beattie, Ingrid A.
/ REGISTRATION NUMBER: P-42,306
/ REFERENCE/DOCKET NUMBER: 08830/022003
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 617/542-5070
/ TELEFAX: 617/542-8906
/ TELEX: 200154
/ INFORMATION FOR SEQ ID NO: 11:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 15 amino acids
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; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-08-455-685-11

Query Match 92.2%; Score 71; DB 3; Length 15;  
Best Local Similarity 93.3%; Pred. No. 7.4e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQPGGPAFVTIGK 15  
Db 1 RITRGPAFVTIGK 15

## RESULT 150

US-08-455-685-13  
; Sequence 13, Application US/08455685  
; Patent No. 6214347  
; GENERAL INFORMATION:  
; APPLICANT: Berzofsky, Jay A.  
; APPLICANT: Ahlers, Jeffrey D.  
; APPLICANT: Pendleton, C. David  
; APPLICANT: Nara, Peter  
; APPLICANT: Shirai, Mutsunori  
; TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT  
; TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
; TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
; NUMBER OF SEQUENCES: 40  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Fish & Richardson P.C.  
; STREET: 225 Franklin Street  
; CITY: Boston  
; STATE: MA  
; COUNTRY: US  
; ZIP: 02110-2804  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: Windows95  
; SOFTWARE: FastSeq for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/455,685  
; FILING DATE: 31-MAY-1995  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/060,988  
; FILING DATE: 14-MAY-1993  
; APPLICATION NUMBER: 07/847,311  
; FILING DATE: 06-MAR-1992  
; APPLICATION NUMBER: 07/751,998  
; FILING DATE: 29-AUG-1991  
; APPLICATION NUMBER: 07/148,692  
; FILING DATE: 26-JAN-1988  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Beattie, Ingrid A.  
; REGISTRATION NUMBER: P-42,306  
; REFERENCE/DOCKET NUMBER: 08830/022003  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617/542-5070  
; TELEFAX: 617/542-8906  
; TELEX: 200154  
; INFORMATION FOR SEQ ID NO: 13:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-08-455-685-13

Query Match 92.2%; Score 71; DB 3; Length 15;  
Best Local Similarity 93.3%; Pred. No. 7.4e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQPGGPAFVTIGK 15

Db 1 RIQAPGPAFVTIGK 15

## RESULT 151

US-08-455-685-15  
; Sequence 15, Application US/08455685  
; Patent No. 6214347  
; GENERAL INFORMATION:  
; APPLICANT: Berzofsky, Jay A.  
; APPLICANT: Ahlers, Jeffrey D.  
; APPLICANT: Pendleton, C. David  
; APPLICANT: Nara, Peter  
; APPLICANT: Shirai, Mutsunori  
; TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT  
; TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
; TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
; NUMBER OF SEQUENCES: 40  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Fish & Richardson P.C.  
; STREET: 225 Franklin Street  
; CITY: Boston  
; STATE: MA  
; COUNTRY: US  
; ZIP: 02110-2804  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: Windows95  
; SOFTWARE: FastSeq for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/455,685  
; FILING DATE: 31-MAY-1995  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/060,988  
; FILING DATE: 14-MAY-1993  
; APPLICATION NUMBER: 07/847,311  
; FILING DATE: 06-MAR-1992  
; APPLICATION NUMBER: 07/751,998  
; FILING DATE: 29-AUG-1991  
; APPLICATION NUMBER: 07/148,692  
; FILING DATE: 26-JAN-1988  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Beattie, Ingrid A.  
; REGISTRATION NUMBER: P-42,306  
; REFERENCE/DOCKET NUMBER: 08830/022003  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617/542-5070  
; TELEFAX: 617/542-8906  
; TELEX: 200154  
; INFORMATION FOR SEQ ID NO: 15:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-08-455-685-15

Query Match 92.2%; Score 71; DB 3; Length 15;  
Best Local Similarity 93.3%; Pred. No. 7.4e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQPGGPAFVTIGK 15  
Db 1 RIQPGPAFVTIGK 15

## RESULT 152

US-08-455-685-16  
; Sequence 16, Application US/08455685  
; Patent No. 6214347  
; GENERAL INFORMATION:  
; APPLICANT: Berzofsky, Jay A.



```

; APPLICANT: Ahlers, Jeffrey D.
; APPLICANT: Pendleton, C. David
; APPLICANT: Nara, Peter
; APPLICANT: Shirai, Mutsunori
; TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT
; TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND
; TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,685
; FILING DATE: 31-MAY-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/060,988
; FILING DATE: 14-MAY-1993
; APPLICATION NUMBER: 07/847,311
; FILING DATE: 06-MAR-1992
; APPLICATION NUMBER: 07/751,998
; FILING DATE: 29-AUG-1991
; APPLICATION NUMBER: 07/148,692
; FILING DATE: 26-JAN-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Beattie, Ingrid A.
; REGISTRATION NUMBER: P-42,306
; REFERENCE/DOCKET NUMBER: 08830/022003
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617/542-5070
; TELEFAX: 617/542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
;
US-08-455-685-16

Query Match 92.2%; Score 71; DB 3; Length 15;
Best Local Similarity 93.3%; Pred. No. 7.4e-05;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQGPGRGAFVTIGK 15
Db 1 RIQGPGRGAFVTIGK 15

RESULT 153
US-08-455-685-18
; Sequence 18, Application US/08455685
; Patent No. 6214347
; GENERAL INFORMATION:
; APPLICANT: Berzofsky, Jay A.
; APPLICANT: Ahlers, Jeffrey D.
; APPLICANT: Pendleton, C. David
; APPLICANT: Nara, Peter
; APPLICANT: Shirai, Mutsunori
; TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT
; TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND
; TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,685
; FILING DATE: 31-MAY-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/060,988
; FILING DATE: 14-MAY-1993
; APPLICATION NUMBER: 07/847,311
; FILING DATE: 06-MAR-1992
; APPLICATION NUMBER: 07/751,998
; FILING DATE: 29-AUG-1991
; APPLICATION NUMBER: 07/148,692
; FILING DATE: 26-JAN-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Beattie, Ingrid A.
; REGISTRATION NUMBER: P-42,306
; REFERENCE/DOCKET NUMBER: 08830/022003
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617/542-5070
; TELEFAX: 617/542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
;
US-08-455-685-16

Query Match 92.2%; Score 71; DB 3; Length 15;
Best Local Similarity 93.3%; Pred. No. 7.4e-05;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQGPGRGAFVTIGK 15
Db 1 RIQGPGRGAFVTIGK 15

RESULT 154
US-08-455-685-22
; Sequence 22, Application US/08455685
; Patent No. 6214347
; GENERAL INFORMATION:
; APPLICANT: Berzofsky, Jay A.
; APPLICANT: Ahlers, Jeffrey D.
; APPLICANT: Pendleton, C. David
; APPLICANT: Nara, Peter
; APPLICANT: Shirai, Mutsunori
; TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT
; TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND
; TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,685
; FILING DATE: 31-MAY-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/060,988
; FILING DATE: 14-MAY-1993
; APPLICATION NUMBER: 07/847,311
; FILING DATE: 06-MAR-1992
; APPLICATION NUMBER: 07/751,998
; FILING DATE: 29-AUG-1991
; APPLICATION NUMBER: 07/148,692
; FILING DATE: 26-JAN-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Beattie, Ingrid A.
; REGISTRATION NUMBER: P-42,306
; REFERENCE/DOCKET NUMBER: 08830/022003
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617/542-5070
; TELEFAX: 617/542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
;
US-08-455-685-18

Query Match 92.2%; Score 71; DB 3; Length 15;
Best Local Similarity 93.3%; Pred. No. 7.4e-05;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQGPGRGAFVTIGK 15
Db 1 RIQGPGRGAFVTIGK 15

RESULT 154
US-08-455-685-22
; Sequence 22, Application US/08455685
; Patent No. 6214347
; GENERAL INFORMATION:
; APPLICANT: Berzofsky, Jay A.
; APPLICANT: Ahlers, Jeffrey D.
; APPLICANT: Pendleton, C. David
; APPLICANT: Nara, Peter
; APPLICANT: Shirai, Mutsunori
; TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT
; TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND
; TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,685
; FILING DATE: 31-MAY-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/060,988
; FILING DATE: 14-MAY-1993
; APPLICATION NUMBER: 07/847,311
; FILING DATE: 06-MAR-1992
; APPLICATION NUMBER: 07/751,998
; FILING DATE: 29-AUG-1991
; APPLICATION NUMBER: 07/148,692
; FILING DATE: 26-JAN-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Beattie, Ingrid A.
; REGISTRATION NUMBER: P-42,306
; REFERENCE/DOCKET NUMBER: 08830/022003
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617/542-5070
; TELEFAX: 617/542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
;
US-08-455-685-18
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;/ CURRENT APPLICATION DATA:  
;/ APPLICATION NUMBER: US/08/455,685  
;/ FILING DATE: 31-MAY-1995  
;/ PRIOR APPLICATION DATA:  
;/ APPLICATION NUMBER: 08/060,988  
;/ FILING DATE: 14-MAY-1993  
;/ APPLICATION NUMBER: 07/847,311  
;/ FILING DATE: 06-MAR-1992  
;/ APPLICATION NUMBER: 07/751,998  
;/ FILING DATE: 29-AUG-1991  
;/ APPLICATION NUMBER: 07/148,692  
;/ FILING DATE: 26-JAN-1988  
;/ ATTORNEY/AGENT INFORMATION:  
;/ NAME: Beattie, Ingrid A.  
;/ REGISTRATION NUMBER: P-42,306  
;/ REFERENCE/DOCKET NUMBER: 08830/022003  
;/ TELEPHONE: 617/542-5070  
;/ TELEFAX: 617/542-8906  
;/ TELEX: 200154  
;/ INFORMATION FOR SEQ ID NO: 22:  
;/ SEQUENCE CHARACTERISTICS:  
;/ LENGTH: 15 amino acids  
;/ TYPE: amino acid  
;/ TOPOLOGY: linear  
;/ MOLECULE TYPE: peptide  
;/ US-08-455-685-22

Query Match 92.2%; Score 71; DB 3; Length 15;  
Best Local Similarity 93.3%; Pred. No. 7.4e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIORGPGRAFTVIGK 15  
Db 1 RIORGPGRAFTVIK 15

RESULT 155  
US-08-060-988A-11  
;/ Sequence 11, Application US/08060988A  
;/ Patent No. 6294322  
;/ GENERAL INFORMATION:  
;/ APPLICANT: Berzofsky, Jay A.  
;/ APPLICANT: Ahlers, Jeffrey D.  
;/ APPLICANT: Pendleton, C. David  
;/ APPLICANT: Nara, Peter  
;/ APPLICANT: Shirai, Mutsunori  
;/ TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES  
;/ TITLE OF INVENTION: THAT ELICIT  
;/ TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
;/ TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
;/ NUMBER OF SEQUENCES: 48  
;/ CORRESPONDENCE ADDRESS:  
;/ ADDRESSEE: Fish & Richardson P.C.  
;/ STREET: 225 Franklin Street  
;/ CITY: Boston  
;/ STATE: MA  
;/ COUNTRY: US  
;/ ZIP: 02110-2804  
;/ COMPUTER READABLE FORM:  
;/ MEDIUM TYPE: Diskette  
;/ COMPUTER: IBM Compatible  
;/ OPERATING SYSTEM: Windows95  
;/ SOFTWARE: FastSeq for Windows Version 2.0  
;/ CURRENT APPLICATION DATA:  
;/ APPLICATION NUMBER: US/08/060,988A  
;/ FILING DATE: 14-MAY-1993  
;/ PRIOR APPLICATION DATA:  
;/ APPLICATION NUMBER: 07/847,311  
;/ FILING DATE: 06-MAR-1992  
;/ APPLICATION NUMBER: 07/751,998  
;/ FILING DATE: 29-AUG-1991  
;/ APPLICATION NUMBER: 07/148,692  
;/ FILING DATE: 26-JAN-1988  
;/ ATTORNEY/AGENT INFORMATION:  
;/ NAME: Beattie, Ingrid A.  
;/ REGISTRATION NUMBER: P-42,306  
;/ REFERENCE/DOCKET NUMBER: 08830/022001  
;/ TELEPHONE: 617/542-5070  
;/ TELEFAX: 617/542-8906  
;/ TELEX: 200154  
;/ INFORMATION FOR SEQ ID NO: 13:  
;/ SEQUENCE CHARACTERISTICS:

;/ FILING DATE: 26-JAN-1988  
;/ ATTORNEY/AGENT INFORMATION:  
;/ NAME: Beattie, Ingrid A.  
;/ REGISTRATION NUMBER: P-42,306  
;/ REFERENCE/DOCKET NUMBER: 08830/022001  
;/ TELECOMMUNICATION INFORMATION:  
;/ TELEPHONE: 617/542-5070  
;/ TELEFAX: 617/542-8906  
;/ TELEX: 200154  
;/ INFORMATION FOR SEQ ID NO: 11:  
;/ SEQUENCE CHARACTERISTICS:  
;/ LENGTH: 15 amino acids  
;/ TYPE: amino acid  
;/ TOPOLOGY: linear  
;/ MOLECULE TYPE: peptide  
;/ US-08-060-988A-11

Query Match 92.2%; Score 71; DB 3; Length 15;  
Best Local Similarity 93.3%; Pred. No. 7.4e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIORGPGRAFTVIGK 15  
Db 1 RIORGPGRAFTVIK 15

RESULT 156  
US-08-060-988A-13  
;/ Sequence 13, Application US/08060988A  
;/ Patent No. 6294322  
;/ GENERAL INFORMATION:  
;/ APPLICANT: Berzofsky, Jay A.  
;/ APPLICANT: Ahlers, Jeffrey D.  
;/ APPLICANT: Pendleton, C. David  
;/ APPLICANT: Nara, Peter  
;/ APPLICANT: Shirai, Mutsunori  
;/ TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES  
;/ TITLE OF INVENTION: THAT ELICIT  
;/ TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
;/ TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
;/ NUMBER OF SEQUENCES: 48  
;/ CORRESPONDENCE ADDRESS:  
;/ ADDRESSEE: Fish & Richardson P.C.  
;/ STREET: 225 Franklin Street  
;/ CITY: Boston  
;/ STATE: MA  
;/ COUNTRY: US  
;/ ZIP: 02110-2804  
;/ COMPUTER READABLE FORM:  
;/ MEDIUM TYPE: Diskette  
;/ COMPUTER: IBM Compatible  
;/ OPERATING SYSTEM: Windows95  
;/ SOFTWARE: FastSeq for Windows Version 2.0  
;/ CURRENT APPLICATION DATA:  
;/ APPLICATION NUMBER: US/08/060,988A  
;/ FILING DATE: 14-MAY-1993  
;/ PRIOR APPLICATION DATA:  
;/ APPLICATION NUMBER: 07/847,311  
;/ FILING DATE: 06-MAR-1992  
;/ APPLICATION NUMBER: 07/751,998  
;/ FILING DATE: 29-AUG-1991  
;/ APPLICATION NUMBER: 07/148,692  
;/ FILING DATE: 26-JAN-1988  
;/ ATTORNEY/AGENT INFORMATION:  
;/ NAME: Beattie, Ingrid A.  
;/ REGISTRATION NUMBER: P-42,306  
;/ REFERENCE/DOCKET NUMBER: 08830/022001  
;/ TELECOMMUNICATION INFORMATION:  
;/ TELEPHONE: 617/542-5070  
;/ TELEFAX: 617/542-8906  
;/ TELEX: 200154  
;/ INFORMATION FOR SEQ ID NO: 13:  
;/ SEQUENCE CHARACTERISTICS:

LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-060-988A-13

Query Match 92.2%; Score 71; DB 3; Length 15;  
Best Local Similarity 93.3%; Pred. No. 7.4e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQGPGRFAFTVIGK 15  
Db 1 RIQAPGRFAFTVIGK 15

## RESULT 157

US-08-060-988A-15  
Sequence 15, Application US/08060988A

Patent No. 6294322

GENERAL INFORMATION:

APPLICANT: Berzofsky, Jay A.

APPLICANT: Ahlers, Jeffrey D.

APPLICANT: Pendleton, C. David

APPLICANT: Nara, Peter

APPLICANT: Shirai, Mutsunori

TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES

TITLE OF INVENTION: THAT ELICIT

TITLE OF INVENTION: HELPER T-LYMPHOCYTE AND

TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1

NUMBER OF SEQUENCES: 48

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson P.C.

STREET: 225 Franklin Street

CITY: Boston

STATE: MA

COUNTRY: US

ZIP: 02110-2804

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: Windows95

SOFTWARE: FASTSEQ for Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/060,988A

FILING DATE: 14-MAY-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/847,311

FILING DATE: 06-MAR-1992

APPLICATION NUMBER: 07/751,998

FILING DATE: 29-AUG-1991

APPLICATION NUMBER: 07/148,692

FILING DATE: 26-JAN-1988

ATTORNEY/AGENT INFORMATION:

NAME: Beattie, Ingrid A.

REGISTRATION NUMBER: P-42,306

REFERENCE/DOCKET NUMBER: 08830/022001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 617/542-5070

TELEFAX: 617/542-8906

TELEX: 200154

INFORMATION FOR SEQ ID NO: 15:

SEQUENCE CHARACTERISTICS:

LENGTH: 15 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-060-988A-15

Query Match 92.2%; Score 71; DB 3; Length 15;  
Best Local Similarity 93.3%; Pred. No. 7.4e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQGPGRFAFTVIGK 15

Db 1 RIQGPGRFAFTVIGK 15

## RESULT 158

US-08-060-988A-16

Sequence 16, Application US/08060988A

Patent No. 6294322

GENERAL INFORMATION:

APPLICANT: Berzofsky, Jay A.

APPLICANT: Ahlers, Jeffrey D.

APPLICANT: Pendleton, C. David

APPLICANT: Nara, Peter

APPLICANT: Shirai, Mutsunori

TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES

TITLE OF INVENTION: THAT ELICIT

TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND

TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1

NUMBER OF SEQUENCES: 48

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson P.C.

STREET: 225 Franklin Street

CITY: Boston

STATE: MA

COUNTRY: US

ZIP: 02110-2804

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: Windows95

SOFTWARE: FASTSEQ for Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/060,988A

FILING DATE: 14-MAY-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/847,311

FILING DATE: 06-MAR-1992

APPLICATION NUMBER: 07/751,998

FILING DATE: 29-AUG-1991

APPLICATION NUMBER: 07/148,692

FILING DATE: 26-JAN-1988

ATTORNEY/AGENT INFORMATION:

NAME: Beattie, Ingrid A.

REGISTRATION NUMBER: P-42,306

REFERENCE/DOCKET NUMBER: 08830/022001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 617/542-5070

TELEFAX: 617/542-8906

TELEX: 200154

INFORMATION FOR SEQ ID NO: 16:

SEQUENCE CHARACTERISTICS:

LENGTH: 15 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-060-988A-16

Query Match 92.2%; Score 71; DB 3; Length 15;  
Best Local Similarity 93.3%; Pred. No. 7.4e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQGPGRFAFTVIGK 15

Db 1 RIQGPGRFAFTVIGK 15

## RESULT 159-

US-08-060-988A-18

Sequence 18, Application US/08060988A

Patent No. 6294322

GENERAL INFORMATION:

APPLICANT: Berzofsky, Jay A.

APPLICANT: Ahlers, Jeffrey D.

APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES  
TITLE OF INVENTION: THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 48  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/060.988A  
FILING DATE: 14-MAY-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 18:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-060-988A-18

Query Match 92.2%; Score 71; DB 3; Length 15;  
Best Local Similarity 93.3%; Pred. No. 7.4e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQGPGRFAVTIGK 15  
| | | | | | | | | | | | | | |  
Db 1 RIQGPGRFAVTIGK 15

RESULT 160  
US-08-060-988A-22  
Sequence 22, Application US/08060988A  
Patent No. 6294322  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES  
TITLE OF INVENTION: THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 48  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street

CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/060.988A  
FILING DATE: 14-MAY-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 22:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-060-988A-22

Query Match 92.2%; Score 71; DB 3; Length 15;  
Best Local Similarity 93.3%; Pred. No. 7.4e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQGPGRFAVTIGK 15  
| | | | | | | | | | | | | | |  
Db 1 RIQGPGRFAVTIGK 15

RESULT 161  
PCT-US94-05142-11  
Sequence 11, Application PC/TUS9405142  
GENERAL INFORMATION:  
APPLICANT: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/05142  
FILING DATE: 13-MAY-1994  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:

```
/ NAME: Svensson, Leonard R.
/ REGISTRATION NUMBER: 30330
/ REFERENCE/DOCKET NUMBER: 1173-434P
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 703-205-8000
/ TELEFAX: 703-205-8050
/ INFORMATION FOR SEQ ID NO: 11:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 15 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
/ FRAGMENT TYPE: internal
/ FEATURE:
/ NAME/KEY: Peptide
/ LOCATION: 1..15
/ OTHER INFORMATION: /label= peptide
/ OTHER INFORMATION: /note= "p18-3, see Table v"
PCT-US94-05142-11

Query Match          92.2%; Score 71; DB 5; Length 15;
Best Local Similarity 93.3%; Pred. No. 7.4e-05;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQPGGPAFVTIGK 15
Db 1 RITRGGPAFVTIGK 15

RESULT 162
PCT-US94-05142-13
/ Sequence 13, Application PC/TUS9405142
/ GENERAL INFORMATION:
/ APPLICANT:
/ TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT
/ TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T
/ NUMBER OF SEQUENCES: 36
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Birch, Stewart, Kolasch & Birch
/ STREET: P.O. Box 747
/ CITY: Falls Church
/ STATE: Virginia
/ COUNTRY: USA
/ ZIP: 22040-0747
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: PCT/US94/05142
/ FILING DATE: 13-MAY-1994
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/060,988
/ FILING DATE: 14-MAY-1993
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Svensson, Leonard R.
/ REGISTRATION NUMBER: 30330
/ REFERENCE/DOCKET NUMBER: 1173-434P
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 703-205-8000
/ TELEFAX: 703-205-8050
/ INFORMATION FOR SEQ ID NO: 13:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 15 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
/ FRAGMENT TYPE: internal
/ FEATURE:
/ NAME/KEY: Peptide
/ LOCATION: 1..15
/ OTHER INFORMATION: /label= peptide
/ OTHER INFORMATION: /note= "p18-7, see Table v"
PCT-US94-05142-15

Query Match          92.2%; Score 71; DB 5; Length 15;
Best Local Similarity 93.3%; Pred. No. 7.4e-05;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQPGGPAFVTIGK 15
Db 1 RITRGGPAFVTIGK 15

RESULT 164
PCT-US94-05142-13
/ Sequence 13, Application PC/TUS9405142
/ GENERAL INFORMATION:
/ APPLICANT:
/ TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT
/ TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T
/ NUMBER OF SEQUENCES: 36
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Birch, Stewart, Kolasch & Birch
/ STREET: P.O. Box 747
/ CITY: Falls Church
/ STATE: Virginia
/ COUNTRY: USA
/ ZIP: 22040-0747
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: PCT/US94/05142
/ FILING DATE: 13-MAY-1994
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/060,988
/ FILING DATE: 14-MAY-1993
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Svensson, Leonard R.
/ REGISTRATION NUMBER: 30330
/ REFERENCE/DOCKET NUMBER: 1173-434P
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 703-205-8000
/ TELEFAX: 703-205-8050
/ INFORMATION FOR SEQ ID NO: 13:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 15 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
/ FRAGMENT TYPE: internal
/ FEATURE:
/ NAME/KEY: Peptide
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PCT-US94-05142-16  
; Sequence 16, Application PC/TUS9405142  
; GENERAL INFORMATION:  
; APPLICANT:  
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
; TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Birch, Stewart, Kolasch & Birch  
; STREET: P.O. Box 747  
; CITY: Falls Church  
; STATE: Virginia  
; COUNTRY: USA  
; ZIP: 22040-0747  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US94/05142  
; FILING DATE: 13-MAY-1994  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/060,988  
; FILING DATE: 14-MAY-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Svensson, Leonard R.  
; REGISTRATION NUMBER: 30330  
; REFERENCE/DOCKET NUMBER: 1173-434P  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-205-8000  
; TELEFAX: 703-205-8050  
; INFORMATION FOR SEQ ID NO: 16:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; FRAGMENT TYPE: internal  
; FEATURE:  
; NAME/KEY: Peptide  
; LOCATION: 1..15  
; OTHER INFORMATION: /label= peptide  
; OTHER INFORMATION: /note= "p18-8, see Table V"  
PCT-US94-05142-16  
  
Query Match 92.2%; Score 71; DB 5; Length 15;  
Best Local Similarity 93.3%; Pred. No. 7.4e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Oy 1 RIQGPGRGAFVTIGK 15  
| | | | | | | | | | | | | | |  
Db 1 RIQGPGRGAFVTIGK 15  
  
RESULT 165  
PCT-US94-05142-18  
; Sequence 18, Application PC/TUS9405142  
; GENERAL INFORMATION:  
; APPLICANT:  
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
; TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Birch, Stewart, Kolasch & Birch  
; STREET: P.O. Box 747  
; CITY: Falls Church  
; STATE: Virginia  
; COUNTRY: USA  
; ZIP: 22040-0747

COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US94/05142  
; FILING DATE: 13-MAY-1994  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/060,988  
; FILING DATE: 14-MAY-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Svensson, Leonard R.  
; REGISTRATION NUMBER: 30330  
; REFERENCE/DOCKET NUMBER: 1173-434P  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-205-8000  
; TELEFAX: 703-205-8050  
; INFORMATION FOR SEQ ID NO: 18:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; FRAGMENT TYPE: internal  
; FEATURE:  
; NAME/KEY: Peptide  
; LOCATION: 1..15  
; OTHER INFORMATION: /label= peptide  
; OTHER INFORMATION: /note= "p18-10, see Table V"  
PCT-US94-05142-18  
  
Query Match 92.2%; Score 71; DB 5; Length 15;  
Best Local Similarity 93.3%; Pred. No. 7.4e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Oy 1 RIQGPGRGAFVTIGK 15  
| | | | | | | | | | | | | | |  
Db 1 RIQGPGRGAFVTIGK 15  
  
RESULT 166  
PCT-US94-05142-22  
; Sequence 22, Application PC/TUS9405142  
; GENERAL INFORMATION:  
; APPLICANT:  
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
; TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Birch, Stewart, Kolasch & Birch  
; STREET: P.O. Box 747  
; CITY: Falls Church  
; STATE: Virginia  
; COUNTRY: USA  
; ZIP: 22040-0747  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US94/05142  
; FILING DATE: 13-MAY-1994  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/060,988  
; FILING DATE: 14-MAY-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Svensson, Leonard R.  
; REGISTRATION NUMBER: 30330

REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 22:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "p18-14, see Table V"  
PCT-US94-05142-22

Query Match 92.2%; Score 71; DB 5; Length 15;  
Best Local Similarity 93.3%; Pred. No. 7.4e-05;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQPGGRAFTVIGK 15  
DB 1 RIQPGGRAFTVIAK 15

RESULT 167  
US-08-455-625-14  
Sequence 14, Application US/08455625  
Patent No. 5932218

GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. D.  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,625  
FILING DATE:

CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 14:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide

FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "p18-6, see Table V"  
US-08-455-625-14

Query Match 89.6%; Score 69; DB 2; Length 15;  
Best Local Similarity 93.3%; Pred. No. 0.00015;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQPGGRAFTVIGK 15  
DB 1 RIQPGGRAFTVIGK 15

RESULT 168  
US-08-455-685-14  
Sequence 14, Application US/08455685  
Patent No. 6214347

GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 40  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P. C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804

COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FASTSEQ for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,685  
FILING DATE: 31-MAY-1995

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/060,988  
FILING DATE: 14-MAY-1993  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022003  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154

INFORMATION FOR SEQ ID NO: 14:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-455-685-14

Query Match 89.6%; Score 69; DB 3; Length 15;  
Best Local Similarity 93.3%; Pred. No. 0.00015;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 1 RIQPGGFAFVTIGK 15  
|||||  
Db 1 RIQGGAGFAFVTIGK 15

## RESULT 169

US-08-060-988A-14  
; Sequence 14, Application US/08060988A  
; Patent No. 6294322

## GENERAL INFORMATION:

APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori

## TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES

## TITLE OF INVENTION: THAT ELICIT

TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1

NUMBER OF SEQUENCES: 48

## CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA

COUNTRY: US

ZIP: 02110-2804

## COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FastSeq for Windows Version 2.0

## CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/060,988A

FILING DATE: 14-MAY-1993

## PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/847,311

FILING DATE: 06-MAR-1992

APPLICATION NUMBER: 07/751,998

FILING DATE: 29-AUG-1991

APPLICATION NUMBER: 07/148,692

FILING DATE: 26-JAN-1988

## ATTORNEY/AGENT INFORMATION:

NAME: Beattie, Ingrid A.

REGISTRATION NUMBER: P-42,306

REFERENCE/DOCKET NUMBER: 08830/022001

## TELECOMMUNICATION INFORMATION:

TELEPHONE: 617/542-5070

TELEFAX: 617/542-8906

TELEX: 200154

INFORMATION FOR SEQ ID NO: 14:

SEQUENCE CHARACTERISTICS:

LENGTH: 15 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-060-988A-14

Query Match 89.6%; Score 69; DB 3; Length 15;  
Best Local Similarity 93.3%; Pred. No. 0.00015;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 1 RIQPGGFAFVTIGK 15  
|||||  
Db 1 RIQGGAGFAFVTIGK 15

## RESULT 170

PCT-US94-05142-14

; Sequence 14, Application PC/TUS9405142

## GENERAL INFORMATION:

APPLICANT: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT

TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T

TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV

NUMBER OF SEQUENCES: 36

## CORRESPONDENCE ADDRESS:

ADDRESSEE: Birch, Stewart, Kolasch & Birch

STREET: P.O. Box 747

CITY: Falls Church

STATE: Virginia

COUNTRY: USA

ZIP: 22040-0747

## COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

## CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US94/05142

FILING DATE: 13-MAY-1994

## CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/060,988

FILING DATE: 14-MAY-1993

## ATTORNEY/AGENT INFORMATION:

NAME: Svensson, Leonard R.

REGISTRATION NUMBER: 30330

REFERENCE/DOCKET NUMBER: 1173-434P

## TELECOMMUNICATION INFORMATION:

TELEPHONE: 703-205-8000

TELEFAX: 703-205-8050

INFORMATION FOR SEQ ID NO: 14:

SEQUENCE CHARACTERISTICS:

LENGTH: 15 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

FRAGMENT TYPE: internal

## FEATURE:

NAME/KEY: Peptide

LOCATION: 1..15

OTHER INFORMATION: /label= peptide

OTHER INFORMATION: /note= "p18-6, see Table V"

PCT-US94-05142-14

Query Match 89.6%; Score 69; DB 5; Length 15;  
Best Local Similarity 93.3%; Pred. No. 0.00015;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 1 RIQPGGFAFVTIGK 15  
|||||  
Db 1 RIQGGAGFAFVTIGK 15

## RESULT 171

US-08-279-906A-17

; Sequence 17, Application US/08279906A

; Patent No. 5618922

## GENERAL INFORMATION:

APPLICANT: Ohno, Tsuneya

APPLICANT: Terada, Masaki

APPLICANT: Yoneda, Yukio

TITLE OF INVENTION: NM03 Antibody Materials and Methods

NUMBER OF SEQUENCES: 27

## CORRESPONDENCE ADDRESS:

ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &

ADDRESSEE: Borun

STREET: 6300 Sears Tower, 233 S. Wacker Drive

CITY: Chicago

STATE: Illinois

COUNTRY: USA

ZIP: 60606

## COMPUTER READABLE FORM:



; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/279,906A  
; FILING DATE:  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: No. 5618922and, Greta E.  
; REGISTRATION NUMBER: 35,302  
; REFERENCE/DOCKET NUMBER: 32028  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (312) 474-6300  
; TELEFAX: (312) 474-0448  
; TELEX: 25-3856

; INFORMATION FOR SEQ ID NO: 17:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 13 amino acids

; TYPE: amino acid

; TOPOLOGY: linear

; MOLECULE TYPE: peptide

; US-08-279-906A-17

Query Match 88.3%; Score 68; DB 1; Length 13;

Best Local Similarity 100.0%; Pred. No. 0.00019;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 ORGPGRAFVTIGK 15

DB 1 ORGPGRAFVTIGK 13

RESULT 172

US-08-455-625-10

; Sequence 10, Application US/08455625

; Patent No. 5932218

; GENERAL INFORMATION:

; APPLICANT: Berzofsky, Jay A.

; APPLICANT: Ahlers, Jeffrey D.

; APPLICANT: Pendleton, C. D.

; APPLICANT: Nara, Peter

; APPLICANT: Shirai, Mutsunori

; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT

; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T

; TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV

; NUMBER OF SEQUENCES: 36

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Birch, Stewart, Kolasch & Birch

; STREET: P.O. Box 747

; CITY: Falls Church

; STATE: Virginia

; COUNTRY: USA

; ZIP: 22040-0747

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/455,625

; FILING DATE:

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/060,988

; FILING DATE: 14-MAY-1993

; ATTORNEY/AGENT INFORMATION:

; NAME: Svensson, Leonard R.

; REGISTRATION NUMBER: 30330

; REFERENCE/DOCKET NUMBER: 1173-434P

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 703-205-8000

; TELEFAX: 703-205-8050

; INFORMATION FOR SEQ ID NO: 10:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 14 amino acids

; TYPE: amino acid

; TOPOLOGY: linear

; MOLECULE TYPE: peptide

; FRAGMENT TYPE: internal

; FEATURE:

; NAME/KEY: Peptide

; LOCATION: 1..14

; OTHER INFORMATION: /label= peptide

; OTHER INFORMATION: /note= "p18-2, see Table V"

; US-08-455-625-10

Query Match 88.3%; Score 68; DB 2; Length 14;

Best Local Similarity 100.0%; Pred. No. 0.0002;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 ORGPGRAFVTIGK 15

DB 2 ORGPGRAFVTIGK 14

RESULT 173

US-08-455-685-10

; Sequence 10, Application US/08455685

; Patent No. 6214347

; GENERAL INFORMATION:

; APPLICANT: Berzofsky, Jay A.

; APPLICANT: Ahlers, Jeffrey D.

; APPLICANT: Pendleton, C. David

; APPLICANT: Nara, Peter

; APPLICANT: Shirai, Mutsunori

; TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT

; TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND

; TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1

; NUMBER OF SEQUENCES: 40

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Fish & Richardson P.C.

; STREET: 225 Franklin Street

; CITY: Boston

; STATE: MA

; COUNTRY: US

; ZIP: 02110-2804

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Diskette

; COMPUTER: IBM Compatible

; OPERATING SYSTEM: Windows95

; SOFTWARE: FastSeq for Windows Version 2.0

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/455,685

; FILING DATE: 31-MAY-1995

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 08/060,988

; FILING DATE: 14-MAY-1993

; APPLICATION NUMBER: 07/847,311

; FILING DATE: 06-MAR-1992

; APPLICATION NUMBER: 07/751,998

; FILING DATE: 29-AUG-1991

; APPLICATION NUMBER: 07/148,692

; FILING DATE: 26-JAN-1988

; ATTORNEY/AGENT INFORMATION:

; NAME: Beattie, Ingrid A.

; REGISTRATION NUMBER: P-42,306

; REFERENCE/DOCKET NUMBER: 08830/022003

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 617/542-5070

; TELEFAX: 617/542-8906

; TELEX: 200154

; INFORMATION FOR SEQ ID NO: 10:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 14 amino acids

; TYPE: amino acid

TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-455-685-10

Query Match 88.3%; Score 68; DB 3; Length 14;  
Best Local Similarity 100.0%; Pred. No. 0.0002;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 QRGPGRAFTVIGK 15  
Db 2 QRGPGRAFTVIGK 14

## RESULT 174

US-08-060-988A-10  
Sequence 10, Application US/08060988A  
Patent No. 6294322

## GENERAL INFORMATION:

APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES  
TITLE OF INVENTION: THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 48  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804

## COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: Fast-SEQ for Windows Version 2.0

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/060,988A

FILING DATE: 14-MAY-1993

## PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/847,311

FILING DATE: 06-MAR-1992

APPLICATION NUMBER: 07/751,998

FILING DATE: 29-AUG-1991

APPLICATION NUMBER: 07/148,692

FILING DATE: 26-JAN-1988

## ATTORNEY/AGENT INFORMATION:

NAME: Beattie, Ingrid A.

REGISTRATION NUMBER: P-42,306

REFERENCE/DOCKET NUMBER: 08830/022001

## TELECOMMUNICATION INFORMATION:

TELEPHONE: 617/542-5070

TELEFAX: 617/542-8906

TELEX: 200154

## INFORMATION FOR SEQ ID NO: 10:

SEQUENCE CHARACTERISTICS:

LENGTH: 14 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-060-988A-10

Query Match 88.3%; Score 68; DB 3; Length 14;  
Best Local Similarity 100.0%; Pred. No. 0.0002;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 QRGPGRAFTVIGK 15  
Db 2 QRGPGRAFTVIGK 14

## RESULT 175

PCT-US94-05142-10

Sequence 10, Application PC/TUS9405142

## GENERAL INFORMATION:

APPLICANT:  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
NUMBER OF SEQUENCES: 36

## CORRESPONDENCE ADDRESS:

ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747

## COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US94/05142

FILING DATE: 13-MAY-1994

## CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/060,988

FILING DATE: 14-MAY-1993

## ATTORNEY/AGENT INFORMATION:

NAME: Svensson, Leonard R.

REGISTRATION NUMBER: 30330

REFERENCE/DOCKET NUMBER: 1173-434P

## TELECOMMUNICATION INFORMATION:

TELEPHONE: 703-205-8000

TELEFAX: 703-205-8050

INFORMATION FOR SEQ ID NO: 10:

SEQUENCE CHARACTERISTICS:

LENGTH: 14 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

FRAGMENT TYPE: internal

## FEATURE:

NAME/KEY: Peptide

LOCATION: 1..14

OTHER INFORMATION: /label= peptide

OTHER INFORMATION: /note= "p18-2, see Table v"

PCT-US94-05142-10

## Query Match

Best Local Similarity 88.3%; Score 68; DB 5; Length 14;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 QRGPGRAFTVIGK 15

Db 2 QRGPGRAFTVIGK 14

## RESULT 176

US-08-257-528B-51

Sequence 51, Application US/08257528B

Patent No. 5639854

## GENERAL INFORMATION:

APPLICANT: SIA, Charles D.Y.

APPLICANT: CHONG, Pele

APPLICANT: KLEIN, Michel H.

TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides

NUMBER OF SEQUENCES: 101

## CORRESPONDENCE ADDRESS:

ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue

/ CITY: Toronto  
/ STATE: Ontario  
/ COUNTRY: Canada  
/ ZIP: M5G 1R7  
/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: Floppy disk  
/ COMPUTER: IBM PC compatible  
/ OPERATING SYSTEM: PC-DOS/MS-DOS  
/ SOFTWARE: Patent In Release #1.0, Version #1.25  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: US/08/257,528B  
/ FILING DATE: 09-JUN-1994  
/ CLASSIFICATION: 424  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: STEWART, MICHAEL I.  
/ REGISTRATION NUMBER: 24,973  
/ REFERENCE/DOCKET NUMBER: 1038-336 MIS:jb  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (416) 595-1155  
/ TELEFAX: (416) 595-1163  
/ INFORMATION FOR SEQ ID NO: 51:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 20 amino acids  
/ TYPE: amino acid  
/ STRANDEDNESS: single  
/ TOPOLOGY: linear  
/ US-08-257-528B-51

Query Match 87.0%; Score 67; DB 1; Length 20;  
Best Local Similarity 92.9%; Pred. No. 0.00041;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQRGPGRAFTVIG 14  
Db 7 RIQRGPGRAFTYIG 20

RESULT 177  
US-08-460-602A-51  
/ Sequence 51, Application US/08460602A  
/ Patent No. 5759769  
/ GENERAL INFORMATION:  
/ APPLICANT: SIA, Charles D.Y.  
/ APPLICANT: CHONG, Pele  
/ APPLICANT: KLEIN, Michel H.  
/ TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
/ NUMBER OF SEQUENCES: 101  
/ CORRESPONDENCE ADDRESS:  
/ ADDRESSEE: Sim & McBurney  
/ STREET: Suite 701, 330 University Avenue  
/ CITY: Toronto  
/ STATE: Ontario  
/ COUNTRY: Canada  
/ ZIP: M5G 1R7  
/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: Floppy disk  
/ COMPUTER: IBM PC compatible  
/ OPERATING SYSTEM: PC-DOS/MS-DOS  
/ SOFTWARE: Patent In Release #1.0, Version #1.25  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: US/08/460,602A  
/ FILING DATE: 02-JUN-1995  
/ CLASSIFICATION: 424  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: 08/257,528  
/ FILING DATE: 09-JUN-1994  
/ CLASSIFICATION: 424  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: 08/073,378  
/ FILING DATE: 09-JUN-1993  
/ CLASSIFICATION: 424  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: STEWART, MICHAEL I.

/ REGISTRATION NUMBER: 24,973  
/ REFERENCE/DOCKET NUMBER: 1038-450 MIS:jb  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (416) 595-1155  
/ TELEFAX: (416) 595-1163  
/ INFORMATION FOR SEQ ID NO: 51:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 20 amino acids  
/ TYPE: amino acid  
/ STRANDEDNESS: single  
/ TOPOLOGY: linear  
/ US-08-460-602A-51

Query Match 87.0%; Score 67; DB 1; Length 20;  
Best Local Similarity 92.9%; Pred. No. 0.00041;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQRGPGRAFTVIG 14  
Db 7 RIQRGPGRAFTYIG 20

RESULT 178  
US-08-463-966A-51  
/ Sequence 51, Application US/08463966A  
/ Patent No. 5795955  
/ GENERAL INFORMATION:  
/ APPLICANT: SIA, Charles D.Y.  
/ APPLICANT: CHONG, Pele  
/ APPLICANT: KLEIN, Michel H.  
/ TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
/ NUMBER OF SEQUENCES: 101  
/ CORRESPONDENCE ADDRESS:  
/ ADDRESSEE: Sim & McBurney  
/ STREET: Suite 701, 330 University Avenue  
/ CITY: Toronto  
/ STATE: Ontario  
/ COUNTRY: Canada  
/ ZIP: M5G 1R7  
/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: Floppy disk  
/ COMPUTER: IBM PC compatible  
/ OPERATING SYSTEM: PC-DOS/MS-DOS  
/ SOFTWARE: Patent In Release #1.0, Version #1.25  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: US/08/463,966A  
/ FILING DATE: 05-JUN-1995  
/ CLASSIFICATION: 424  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: 08/257,528  
/ FILING DATE: 09-JUN-1994  
/ CLASSIFICATION: 424  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: 08/073,378  
/ FILING DATE: 09-JUN-1993  
/ CLASSIFICATION: 424  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: STEWART, MICHAEL I.  
/ REGISTRATION NUMBER: 24,973  
/ REFERENCE/DOCKET NUMBER: 1038-487 MIS:jb  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (416) 595-1155  
/ TELEFAX: (416) 595-1163  
/ INFORMATION FOR SEQ ID NO: 51:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 20 amino acids  
/ TYPE: amino acid  
/ STRANDEDNESS: single  
/ TOPOLOGY: linear  
/ US-08-463-966A-51

Query Match 87.0%; Score 67; DB 1; Length 20;  
Best Local Similarity 92.9%; Pred. No. 0.00041;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQGPGRFVFTIG 14  
 |||||  
 Db 7 RIQGPGRFVFTIG 20

## RESULT 179

US-08-465-217A-51  
 ; Sequence 51, Application US/08465217A  
 ; Patent No. 580822  
 ; GENERAL INFORMATION:  
 ; APPLICANT: SIA, Charles D.Y.  
 ; APPLICANT: CHONG, Pele  
 ; APPLICANT: KLEIN, Michel H.  
 ; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
 ; NUMBER OF SEQUENCES: 101  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Sim & McBurney  
 ; STREET: Suite 701, 330 University Avenue  
 ; CITY: Toronto  
 ; STATE: Ontario  
 ; COUNTRY: Canada  
 ; ZIP: MSG IR7  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: Patent In Release #1.0, Version #1.25  
 ; CURRENT APPLICATION DATA:  
 ; FILING DATE: 05-JUN-1995  
 ; APPLICATION NUMBER: US/08/465,217A  
 ; CLASSIFICATION: 424  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: 08/257,528  
 ; FILING DATE: 09-JUN-1994  
 ; CLASSIFICATION: 424  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: 08/073,378  
 ; FILING DATE: 09-JUN-1993  
 ; CLASSIFICATION: 424  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: STEWART, MICHAEL I.  
 ; REGISTRATION NUMBER: 24,973  
 ; REFERENCE/DOCKET NUMBER: 1038-486 MIS:j:b  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (416) 595-1155  
 ; TELEFAX: (416) 595-1163  
 ; INFORMATION FOR SEQ ID NO: 51:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 20 amino acids  
 ; TYPE: amino acid  
 ; STRANDEDNESS: single  
 ; TOPOLOGY: linear  
 ; US-08-465-217A-51

Query Match 87.0%; Score 67; DB 1; Length 20;  
 Best Local Similarity 92.9%; Pred. No. 0.00041;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQGPGRFVFTIG 14  
 |||||  
 Db 7 RIQGPGRFVFTIG 20

## RESULT 180

US-08-464-329A-51  
 ; Sequence 51, Application US/08464329A  
 ; Patent No. 5817754  
 ; GENERAL INFORMATION:  
 ; APPLICANT: SIA, Charles D.Y.  
 ; APPLICANT: CHONG, Pele  
 ; APPLICANT: KLEIN, Michel H.

; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
 ; NUMBER OF SEQUENCES: 101  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Sim & McBurney  
 ; STREET: Suite 701, 330 University Avenue  
 ; CITY: Toronto  
 ; STATE: Ontario  
 ; COUNTRY: Canada  
 ; ZIP: MSG IR7  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: Patent In Release #1.0, Version #1.25  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/464,329A  
 ; FILING DATE: 05-JUN-1995  
 ; CLASSIFICATION: 424  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: 08/257,528  
 ; FILING DATE: 09-JUN-1994  
 ; CLASSIFICATION: 424  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: 08/073,378  
 ; FILING DATE: 09-JUN-1993  
 ; CLASSIFICATION: 424  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: STEWART, MICHAEL I.  
 ; REGISTRATION NUMBER: 24,973  
 ; REFERENCE/DOCKET NUMBER: 1038-449 MIS:j:b  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (416) 595-1155  
 ; TELEFAX: (416) 595-1163  
 ; INFORMATION FOR SEQ ID NO: 51:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 20 amino acids  
 ; TYPE: amino acid  
 ; STRANDEDNESS: single  
 ; TOPOLOGY: linear  
 ; US-08-464-329A-51

Query Match 87.0%; Score 67; DB 2; Length 20;  
 Best Local Similarity 92.9%; Pred. No. 0.00041;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQGPGRFVFTIG 14  
 |||||  
 Db 7 RIQGPGRFVFTIG 20

## RESULT 181

US-08-462-507A-51  
 ; Sequence 51, Application US/08462507A  
 ; Patent No. 5876731  
 ; GENERAL INFORMATION:  
 ; APPLICANT: SIA, Charles D.Y.  
 ; APPLICANT: CHONG, Pele  
 ; APPLICANT: KLEIN, Michel H.  
 ; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
 ; NUMBER OF SEQUENCES: 101  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Sim & McBurney  
 ; STREET: Suite 701, 330 University Avenue  
 ; CITY: Toronto  
 ; STATE: Ontario  
 ; COUNTRY: Canada  
 ; ZIP: MSG IR7  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: Patent In Release #1.0, Version #1.25  
 ; CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/462,507A  
FILING DATE: 05-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/257,528  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/073,378  
FILING DATE: 09-JUN-1993  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-451 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 51:  
LENGTH: 20 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-462-507A-51

Query Match 87.0%; Score 67; DB 2; Length 20;  
Best Local Similarity 92.9%; Pred. No. 0.00041;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQGPGRFVFTIG 14  
|||||

Db 7 RIQGPGRFVFTIG 20

## RESULT 182

US-08-467-881A-51  
Sequence 51, Application US/08467881A  
Patent No. 5951986

## GENERAL INFORMATION:

APPLICANT: SIA, Charles D.Y.  
APPLICANT: CHONG, Pele  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/467,881A  
FILING DATE: 06-JUN-1995  
CLASSIFICATION: 424

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/257,528  
FILING DATE: 09-JUN-1993  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-488 MIS:jb

TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 51:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-467-881A-51

Query Match 87.0%; Score 67; DB 2; Length 20;  
Best Local Similarity 92.9%; Pred. No. 0.00041;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQGPGRFVFTIG 14  
|||||

Db 7 RIQGPGRFVFTIG 20

## RESULT 183

US-08-930-917A-14  
Sequence 14, Application US/08930917A  
Patent No. 6146635

## GENERAL INFORMATION:

APPLICANT: DUARTE CANO, C. A.  
APPLICANT: GUILL N NIETO, G. E.  
APPLICANT: MART N DUNN, A. M.  
APPLICANT: ALVAREZ ACOSTA, A.  
APPLICANT: CARPIO MUÑOZ, E. L.  
APPLICANT: QUINTANA V. D.  
APPLICANT: G MEZ RODR GUEZ, C. E.  
APPLICANT: SILVA RODR GUEZ, R. C.  
APPLICANT: NAZ BAL G LVEZ, C.  
APPLICANT: LEAL ANGULO, M. J.  
TITLE OF INVENTION: System for the expression of heterologous  
TITLE OF INVENTION: antigens as fusion proteins  
NUMBER OF SEQUENCES: 21  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Lackenbach Siegel Marzullo Aronson & Greenspan  
STREET: One Chase Road  
CITY: Scarsdale  
STATE: New York  
COUNTRY: U.S.  
ZIP: 10583

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk 3.5" (1.4 MB).

COMPUTER: Compatible PC IBM (80486, 8 M Ram).

OPERATING SYSTEM: Windows 95.

SOFTWARE: Word Perfect 5.0 for Windows 95.

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/930,917A

FILING DATE: 16-Sep-1997

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/CU97/00001

FILING DATE: 17-Jan-1997

ATTORNEY/AGENT INFORMATION:

NAME: HENEY A. MARZULLO, JR.

REGISTRATION NUMBER: 20,910

REFERENCE/DOCKET NUMBER: P-13

TELECOMMUNICATION INFORMATION:

TELEPHONE: (914) 723-4300

TELEFAX: (914) 723-4301

INFORMATION FOR SEQ ID NO: 14:

SEQUENCE CHARACTERISTICS:

LENGTH: 15 Amino acid residues

TYPE: Amino acid

STRANDEDNESS: Unknown

TOPOLOGY: Unknown

MOLECULE TYPE: Peptide

HYPOTHETICAL: NO

ANTI-SENSE: NO

```

; FRAGMENT TYPE: Internal fragment
; ORIGINAL SOURCE:
; ORGANISM: VIH-1
; INDIVIDUAL ISOLATE: IIB
; FEATURE:
; OTHER INFORMATION: Central region of the loop V3 belonging to the
; OTHER INFORMATION: protein gp120 from the VIH-1, isolation IIB.
US-08-930-917A-14
Query Match 85.7%; Score 66; DB 3; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.00045;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFTVI 13
   |||||
Db 3 RIQPGGRAFTVI 15

RESULT 184
US-08-493-235-23
; Sequence 23, Application US/08493235
; Patent No. 5840313
; GENERAL INFORMATION:
; APPLICANT: Vahlne, Anders
; APPLICANT: Svennerholm, Bo
; APPLICANT: Rymo, Lars
; APPLICANT: Jeansson, Stig
; APPLICANT: Horal, Peter
; TITLE OF INVENTION: PEPTIDES FOR USE IN VACCINATION AND
; TITLE OF INVENTION: INDUCTION OF NEUTRALIZING ANTIBODIES AGAINST HUMAN
; TITLE OF INVENTION: IMMUNODEFICIENCY VIRUS
; NUMBER OF SEQUENCES: 41
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: KNOBE, MARTENS, OLSON AND BEAR
; STREET: 620 NEWPORT CENTER DRIVE 16TH FLOOR
; CITY: NEWPORT BEACH
; STATE: CA
; COUNTRY: USA
; ZIP: 92660
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/493,235
; FILING DATE: 20 June/1995
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Kaiser, AnneMarie
; REGISTRATION NUMBER: 37,649
; REFERENCE/DOCKET NUMBER: METRICS.12CPCI
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 619-235-8550
; TELEFAX: 619-235-0176
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: internal
US-08-493-235-23
Query Match 85.7%; Score 66; DB 2; Length 25;
Best Local Similarity 100.0%; Pred. No. 0.00074;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFTVI 13
   |||||

```

```

Db 13 RIQPGGRAFTVI 25

RESULT 185
US-08-279-906A-19
; Sequence 19, Application US/08279906A
; Patent No. 5618922
; GENERAL INFORMATION:
; APPLICANT: Ohno, Tsuneya
; APPLICANT: Terada, Masaki
; APPLICANT: Yoneda, Yukio
; TITLE OF INVENTION: NM03 Antibody Materials and Methods
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
; ADDRESSEE: Borun
; STREET: 6300 Sears Tower, 233 S. Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60606
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/279,906A
; FILING DATE:
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5618922and, Greta E.
; REGISTRATION NUMBER: 35,302
; REFERENCE/DOCKET NUMBER: 32028
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (312) 474-6300
; TELEFAX: (312) 474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 19:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 19 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-279-906A-19
Query Match 83.1%; Score 64; DB 1; Length 19;
Best Local Similarity 92.3%; Pred. No. 0.0012;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 QRGPGRAFTVIGK 15
   |||||
Db 1 QRGPGRTFTVIGK 13

RESULT 186
US-08-704-170-52
; Sequence 52, Application US/08704170
; Patent No. 5707626
; GENERAL INFORMATION:
; APPLICANT: Douvas, Angeline
; APPLICANT: Takehana, Yoshi
; APPLICANT: Ehresmann, Glenn
; TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR
; TITLE OF INVENTION: IMMUNOINFECTIVE CLUSTER VIRUS INFECTIONS
; NUMBER OF SEQUENCES: 121
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Robbins, Berliner & Carson
; STREET: 201 No. 570626th Figueroa Street, Suite 500
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90012

```

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/704,170  
FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/029,850  
FILING DATE: 11-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Spitals, John P.  
REGISTRATION NUMBER: 29,215  
REFERENCE/DOCKET NUMBER: 1920-331  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 977-1001  
TELEFAX: (213) 977-1003  
INFORMATION FOR SEQ ID NO: 52:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 12 amino acids  
TYPE: amino acid  
STRANDEDNESS: linear  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-704-170-52

Query Match 81.8%; Score 63; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 0.0011;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4 RGPGRFVTVIGK 15  
Db 1 RGPGRFVTVIGK 12

RESULT 187  
US-08-488-252-30  
Sequence 30, Application US/08488252  
Patent No. 5763160  
GENERAL INFORMATION:  
APPLICANT: Chang Yi Wang  
TITLE OF INVENTION: SYNTHETIC PEPTIDES AND PROCESS  
OF USING SAME FOR THE DETECTION OF ANTIBODIES TO  
TITLE OF INVENTION: HUMAN IMMUNODEFICIENCY VIRUS (HIV) GP120 ENVELOPE  
TITLE OF INVENTION: PROTEIN, DIAGNOSIS OF AIDS AND PRE-AIDS CONDITIONS  
TITLE OF INVENTION: AND AS VACCINES  
NUMBER OF SEQUENCES: 38  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: MORGAN & FINNEGAN  
STREET: 345 PARK AVE.  
CITY: NEW YORK  
STATE: NEW YORK  
COUNTRY: USA  
ZIP: 10154  
COMPUTER READABLE FORM:  
MEDIUM TYPE: FLOPPY DISK  
COMPUTER: IBM PC COMPATIBLE  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: WORDPERFECT 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/488,252  
FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/326,676  
FILING DATE: 07-Jun-1995  
APPLICATION NUMBER: 07/726,605  
FILING DATE: 09-July-1991  
APPLICATION NUMBER: 07/663,262  
FILING DATE: 01-Mar-1991  
APPLICATION NUMBER: 07/155,321  
FILING DATE: 12-Feb-1988

ATTORNEY/AGENT INFORMATION:  
NAME: Maria C. H. Lin  
REGISTRATION NUMBER: 29,323  
REFERENCE/DOCKET NUMBER: 1151-4004 USA  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212-758-4800  
TELEFAX: (212) 751-6849  
TELEX: 421792  
INFORMATION FOR SEQ ID NO: 30:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 12 amino acids  
TYPE: amino acids  
STRANDEDNESS: Unknown  
TOPOLOGY: Unknown  
US-08-488-252-30  
Query Match 81.8%; Score 63; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 0.0011;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 4 RGPGRFVTVIGK 15  
Db 1 RGPGRFVTVIGK 12

RESULT 188  
PCT-US94-02631-52  
Sequence 52, Application PC/TUS9402631  
GENERAL INFORMATION:  
APPLICANT: Douvas, Angeline  
APPLICANT: Takehana, Yoshi  
APPLICANT: Ehresmann, Glenn  
TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
IMMUNOINFECTION CLUSTER VIRUS INFECTIONS  
NUMBER OF SEQUENCES: 121  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Robbins, Berliner & Carson  
STREET: 201 North Figueroa Street, Suite 500  
CITY: Los Angeles  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 90012  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/02631  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/029,850  
FILING DATE: 11-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Spitals, John P.  
REGISTRATION NUMBER: 29,215  
REFERENCE/DOCKET NUMBER: 1920-331  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 977-1001  
TELEFAX: (213) 977-1003  
INFORMATION FOR SEQ ID NO: 52:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 12 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
PCT-US94-02631-52

Query Match 81.8%; Score 63; DB 5; Length 12;  
Best Local Similarity 100.0%; Pred. No. 0.0011;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
QY 4 RGPGRFVTVIGK 15
DB 1 RGPGRFVTVIGK 12

RESULT 189
PCT-US95-03236-43
; Sequence 43, Application PC/TUS9503236
; GENERAL INFORMATION:
; APPLICANT: University of Southern California
; TITLE OF INVENTION: Methods to Diagnose and Treat HIV-1
; TITLE OF INVENTION: Infection
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Campbell and Flores
; STREET: 4370 La Jolla Village Drive, Suite 700
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92122
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/03236
; FILING DATE: 13-MAR-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Imbra, Richard J.
; REGISTRATION NUMBER: 37,643
; REFERENCE/DOCKET NUMBER: FP-SI 1394
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 535-9001
; TELEFAX: (619) 535-8949
; INFORMATION FOR SEQ ID NO: 43:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
PCT-US95-03236-43

Query Match 81.8%; Score 63; DB 5; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.0011;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTVIGK 15
DB 1 RGPGRFVTVIGK 12

RESULT 190
US-08-105-483-384
; Sequence 384, Application US/08105483
; Patent No. 5494807
; GENERAL INFORMATION:
; APPLICANT: Paoletti, Enzo
; TITLE OF INVENTION: GENETICALLY ENGINEERED VACCINE
; TITLE OF INVENTION: STRAIN
; NUMBER OF SEQUENCES: 462
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Curtis, Morris & Safford
; ADDRESSEE: c/o William S. Frommer
; STREET: 530 Fifth Avenue
; CITY: New York
; STATE: NY
; COUNTRY: USA
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/709,209
; FILING DATE: 21-AUG-1996
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/105,483
; FILING DATE: 12-AUG-1993
; APPLICATION NUMBER: US 07/847,951
; FILING DATE: 06-MAR-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Frommer, William S.
; REGISTRATION NUMBER: 25,506
; REFERENCE/DOCKET NUMBER: 454310-2400
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 840-3333
; TELEFAX: (212) 840-0712
; INFORMATION FOR SEQ ID NO: 384:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-105-483-384

Query Match 81.2%; Score 62.5; DB 1; Length 21;
Best Local Similarity 93.3%; Pred. No. 0.0022;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 RIQGRGFAVTVIGK 15
DB 8 RIQGRGFAVTVIGK 21

RESULT 191
US-08-709-209-384
; Sequence 384, Application US/08709209
; Patent No. 5762938
; GENERAL INFORMATION:
; APPLICANT: Paoletti, Enzo
; TITLE OF INVENTION: GENETICALLY ENGINEERED VACCINE
; TITLE OF INVENTION: STRAIN
; NUMBER OF SEQUENCES: 462
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Curtis, Morris & Safford
; ADDRESSEE: c/o William S. Frommer
; STREET: 530 Fifth Avenue
; CITY: New York
; STATE: NY
; COUNTRY: USA
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/709,209
; FILING DATE: 21-AUG-1996
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/105,483
; FILING DATE: 12-AUG-1993
; APPLICATION NUMBER: US 07/847,951
; FILING DATE: 06-MAR-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Frommer, William S.
; REGISTRATION NUMBER: 25,506
; REFERENCE/DOCKET NUMBER: 454310-2400
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 840-3333
; TELEFAX: (212) 840-0712
; INFORMATION FOR SEQ ID NO: 384:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-105-483-384

Query Match 81.2%; Score 62.5; DB 1; Length 21;
Best Local Similarity 93.3%; Pred. No. 0.0022;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 RIQGRGFAVTVIGK 15
DB 8 RIQGRGFAVTVIGK 21
```





;;  
; TITLE OF INVENTION: Genetically Engineered Enzymes And Their  
; CONJUGATES FOR DIAGNOSTIC ASSAYS  
; NUMBER OF SEQUENCES: 34  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: ABBOTT LABORATORIES  
; STREET: One Abbott Park Road  
; CITY: Abbott Park  
; STATE: Illinois  
; COUNTRY: USA  
; ZIP: 60064-3500  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: SoftPC  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/657,392  
; FILING DATE:  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/100,708  
; FILING DATE: July 29, 1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Wong, Wean Khing  
; REGISTRATION NUMBER: 33,561  
; REFERENCE/DOCKET NUMBER: 5324.US.P1  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (708) 938-3517  
; TELEFAX: (708) 938-2623  
; TELEX:  
; INFORMATION FOR SEQ ID NO: 19:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 13 amino acid residues  
; TYPE: amino acid  
; STRANDEDNESS:  
; TOPOLOGY: unknown  
; MOLECULE TYPE: peptide  
; ORIGINAL SOURCE:  
; ORGANISM:  
; US-08-657-392-19  
;  
; Query Match 80.5%; Score 62; DB 2; Length 13;  
; Best Local Similarity 100.0%; Pred. No. 0.0017;  
; Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
;  
; QY 1 RIQGGGAFVT 12  
; DB 2 RIQGGGAFVT 13  
;  
; RESULT 195  
; US-08-657-392-20  
; Sequence 20, Application US/08657392  
; Patent No. 5843634  
; GENERAL INFORMATION:  
; APPLICANT: Brate, E.M.  
; APPLICANT: Brennan, C.A.  
; APPLICANT: Bridon, D.P.  
; APPLICANT: Jaffe, K.D.  
; APPLICANT: Kraft, G.A.  
; APPLICANT: Mandeck, W.  
; APPLICANT: March, S.C.  
; APPLICANT: Russell, J.R.  
; APPLICANT: Yue, V.T.  
; TITLE OF INVENTION: Genetically Engineered Enzymes And Their  
; CONJUGATES FOR DIAGNOSTIC ASSAYS  
; NUMBER OF SEQUENCES: 34  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: ABBOTT LABORATORIES  
; STREET: One Abbott Park Road  
; CITY: Abbott Park  
; STATE: Illinois  
; COUNTRY: USA  
; ZIP: 60064-3500  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: SoftPC  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/657,392  
; FILING DATE:

;;  
; ZIP: 60064-3500  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: SoftPC  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/657,392  
; FILING DATE:  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/100,708  
; FILING DATE: July 29, 1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Wong, Wean Khing  
; REGISTRATION NUMBER: 33,561  
; REFERENCE/DOCKET NUMBER: 5324.US.P1  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (708) 938-3517  
; TELEFAX: (708) 938-2623  
; TELEX:  
; INFORMATION FOR SEQ ID NO: 20:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 13 amino acid residues  
; TYPE: amino acid  
; STRANDEDNESS:  
; TOPOLOGY: unknown  
; MOLECULE TYPE: peptide  
; ORIGINAL SOURCE:  
; ORGANISM:  
; US-08-657-392-20  
;  
; Query Match 80.5%; Score 62; DB 2; Length 13;  
; Best Local Similarity 100.0%; Pred. No. 0.0017;  
; Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
;  
; QY 1 RIQGGGAFVT 12  
; DB 2 RIQGGGAFVT 13  
;  
; RESULT 196  
; US-08-657-392-21  
; Sequence 21, Application US/08657392  
; Patent No. 5843634  
; GENERAL INFORMATION:  
; APPLICANT: Brate, E.M.  
; APPLICANT: Brennan, C.A.  
; APPLICANT: Bridon, D.P.  
; APPLICANT: Jaffe, K.D.  
; APPLICANT: Kraft, G.A.  
; APPLICANT: Mandeck, W.  
; APPLICANT: March, S.C.  
; APPLICANT: Russell, J.R.  
; APPLICANT: Yue, V.T.  
; TITLE OF INVENTION: Genetically Engineered Enzymes And Their  
; CONJUGATES FOR DIAGNOSTIC ASSAYS  
; NUMBER OF SEQUENCES: 34  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: ABBOTT LABORATORIES  
; STREET: One Abbott Park Road  
; CITY: Abbott Park  
; STATE: Illinois  
; COUNTRY: USA  
; ZIP: 60064-3500  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: SoftPC  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/657,392  
; FILING DATE:

CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/100,708  
FILING DATE: July 29, 1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Wong, Wean Khing  
REGISTRATION NUMBER: 33,561  
REFERENCE/DOCKET NUMBER: 5324.US.P1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (708) 938-3517  
TELEFAX: (708) 938-2623  
TELEX:  
INFORMATION FOR SEQ ID NO: 21:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 13 amino acid residues  
TYPE: amino acid  
STRANDEDNESS:  
TOPOLOGY: unknown  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM:  
US-08-657-392-21

Query Match 80.5%; Score 62; DB 2; Length 13;  
Best Local Similarity 100.0%; Pred. No. 0.0017;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRGAVT 12  
Db 2 RIQGPGRGAVT 13

RESULT 197  
US-08-657-392-23  
Sequence 23, Application US/08657392  
Patent No. 5843634

GENERAL INFORMATION:  
APPLICANT: Brate, E.M.  
APPLICANT: Brennan, C.A.  
APPLICANT: Bridon, D.P.  
APPLICANT: Jaffe, K.D.  
APPLICANT: Krafft, G.A.  
APPLICANT: Mandeck, W.  
APPLICANT: March, S.C.  
APPLICANT: Russell, J.R.  
TITLE OF INVENTION: Genetically Engineered Enzymes And Their  
CONJUGATES FOR DIAGNOSTIC ASSAYS  
NUMBER OF SEQUENCES: 34  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: ABBOTT LABORATORIES  
STREET: One Abbott Park Road  
CITY: Abbott Park  
STATE: Illinois  
COUNTRY: USA  
ZIP: 60064-3500  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: SoftPC  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/657,392  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/100,708  
FILING DATE: July 29, 1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Wong, Wean Khing  
REGISTRATION NUMBER: 33,561  
REFERENCE/DOCKET NUMBER: 5324.US.P1  
TELECOMMUNICATION INFORMATION:

TELEPHONE: (708) 938-3517  
TELEFAX: (708) 938-2623  
TELEX:  
INFORMATION FOR SEQ ID NO: 23:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 13 amino acid residues  
TYPE: amino acid  
STRANDEDNESS:  
TOPOLOGY: unknown  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM:  
US-08-657-392-23

Query Match 80.5%; Score 62; DB 2; Length 13;  
Best Local Similarity 100.0%; Pred. No. 0.0017;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRGAVT 12  
Db 2 RIQGPGRGAVT 13

RESULT 198  
PCT-US94-02539-19  
Sequence 19, Application PC/TUS9402539  
GENERAL INFORMATION:

APPLICANT: Brate, E.M.  
APPLICANT: Brennan, C.A.  
APPLICANT: Bridon, D.P.  
APPLICANT: Jaffe, K.D.  
APPLICANT: Krafft, G.A.  
APPLICANT: Mandeck, W.  
APPLICANT: March, S.C.  
APPLICANT: Russell, J.R.  
TITLE OF INVENTION: Genetically Engineered Enzymes  
AND THEIR CONJUGATES FOR DIAGNOSTIC ASSAYS  
NUMBER OF SEQUENCES: 34  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: ABBOTT LABORATORIES  
STREET: One Abbott Park Road  
CITY: Abbott Park  
STATE: Illinois  
COUNTRY: USA  
ZIP: 60064-3500  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: SoftPC  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/02539  
FILING DATE:  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Wong, Wean Khing  
REGISTRATION NUMBER: 33,561  
REFERENCE/DOCKET NUMBER: 5324.PC.01  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (708) 938-3517  
TELEFAX: (708) 938-2623  
TELEX:  
INFORMATION FOR SEQ ID NO: 19:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 13 amino acid residues  
TYPE: amino acid  
STRANDEDNESS:  
TOPOLOGY: unknown  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM:

PCT-US94-02539-19

Query Match 80.5%; Score 62; DB 5; Length 13;  
Best Local Similarity 100.0%; Pred. No. 0.0017;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQRPGRGAVT 12  
Db 2 RIQRPGRGAVT 13

RESULT 199

PCT-US94-02539-20

; Sequence 20, Application PC/TUS9402539

; GENERAL INFORMATION:

; APPLICANT: Brate, E.M.

; APPLICANT: Brennan, C.A.

; APPLICANT: Bridon, D.P.

; APPLICANT: Jaffe, K.D.

; APPLICANT: Krafft, G.A.

; APPLICANT: Mandeck, W.

; APPLICANT: March, S.C.

; APPLICANT: Russell, J.R.

; APPLICANT: Yue, V.T.

; TITLE OF INVENTION: Genetically Engineered Enzymes

; TITLE OF INVENTION: And Their

; TITLE OF INVENTION: Conjugates For Diagnostic Assays

; NUMBER OF SEQUENCES: 34

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: ABBOTT LABORATORIES

; STREET: One Abbott Park Road

; CITY: Abbott Park

; STATE: Illinois

; COUNTRY: USA

; ZIP: 60064-3500

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: SoftPC

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: PCT/US94/02539

; FILING DATE:

; CLASSIFICATION:

; ATTORNEY/AGENT INFORMATION:

; NAME: Wong, Wean Khing

; REGISTRATION NUMBER: 33,561

; REFERENCE/DOCKET NUMBER: 5324.PC.01

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (708) 938-3517

; TELEFAX: (708) 938-2623

; TELEX:

; INFORMATION FOR SEQ ID NO: 20:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 13 amino acid residues

; TYPE: amino acid

; STRANDEDNESS:

; TOPOLOGY: unknown

; MOLECULE TYPE: peptide

; ORIGINAL SOURCE:

; ORGANISM:

PCT-US94-02539-20

Query Match 80.5%; Score 62; DB 5; Length 13;  
Best Local Similarity 100.0%; Pred. No. 0.0017;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQRPGRGAVT 12  
Db 2 RIQRPGRGAVT 13

RESULT 200

PCT-US94-02539-21

; Sequence 21, Application PC/TUS9402539

; GENERAL INFORMATION:

; APPLICANT: Brate, E.M.

; APPLICANT: Brennan, C.A.

; APPLICANT: Bridon, D.P.

; APPLICANT: Jaffe, K.D.

; APPLICANT: Krafft, G.A.

; APPLICANT: Mandeck, W.

; APPLICANT: March, S.C.

; APPLICANT: Russell, J.R.

; APPLICANT: Yue, V.T.

; TITLE OF INVENTION: Genetically Engineered Enzymes

; TITLE OF INVENTION: And Their

; TITLE OF INVENTION: Conjugates For Diagnostic Assays

; NUMBER OF SEQUENCES: 34

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: ABBOTT LABORATORIES

; STREET: One Abbott Park Road

; CITY: Abbott Park

; STATE: Illinois

; COUNTRY: USA

; ZIP: 60064-3500

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: SoftPC

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: PCT/US94/02539

; FILING DATE:

; CLASSIFICATION:

; ATTORNEY/AGENT INFORMATION:

; NAME: Wong, Wean Khing

; REGISTRATION NUMBER: 33,561

; REFERENCE/DOCKET NUMBER: 5324.PC.01

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (708) 938-3517

; TELEFAX: (708) 938-2623

; TELEX:

; INFORMATION FOR SEQ ID NO: 21:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 13 amino acid residues

; TYPE: amino acid

; STRANDEDNESS:

; TOPOLOGY: unknown

; MOLECULE TYPE: peptide

; ORIGINAL SOURCE:

; ORGANISM:

PCT-US94-02539-21

Query Match 80.5%; Score 62; DB 5; Length 13;  
Best Local Similarity 100.0%; Pred. No. 0.0017;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQRPGRGAVT 12  
Db 2 RIQRPGRGAVT 13

RESULT 201

PCT-US94-02539-23

; Sequence 23, Application PC/TUS9402539

; GENERAL INFORMATION:

; APPLICANT: Brate, E.M.

; APPLICANT: Brennan, C.A.

; APPLICANT: Bridon, D.P.

; APPLICANT: Jaffe, K.D.

; APPLICANT: Krafft, G.A.

; APPLICANT: Mandeck, W.

; APPLICANT: March, S.C.

; APPLICANT: Russell, J.R.

; APPLICANT: Yue, V.T.

```

Query Match      80.5%; Score 62; DB 5; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0017;
Matches 12; Conservative 0; Mismatches 0; Indels 0;

QY      1 RIQGPGRAFVT 12
        |||||
Db       2 RIQGPGRAFVT 13

RESULT 202
US-08-657-392-24
; Sequence 24, Application US/08657392
; Patent No. 5843634
; GENERAL INFORMATION:
; APPLICANT: Brate, E.M.
; APPLICANT: Brennan, C.A.
; APPLICANT: Bridon, D.P.
; APPLICANT: Jaffe, K.D.
; APPLICANT: Krafft, G.A.
; APPLICANT: Mandecki, W.
; APPLICANT: March, S.C.
; APPLICANT: Russell, J.R.
; APPLICANT: Yue, V.T.
; TITLE OF INVENTION: Genetically Engineered Enzymes And Their
; CONJUGATES FOR DIAGNOSTIC ASSAYS
; NUMBER OF SEQUENCES: 34
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ABBOTT LABORATORIES
; STREET: One Abbott Park Road
; CITY: Abbott Park
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60064-3500
; COMPUTER READABLE FORM:

```

```

1 MEDIUM TYPE: Floppy disk
2 COMPUTER: IBM PC compatible
3 OPERATING SYSTEM: PC-DOS/MS-DOS
4 SOFTWARE: SoftPC
5 CURRENT APPLICATION DATA:
6 APPLICATION NUMBER: US/08/657,392
7 FILING DATE:
8 CLASSIFICATION: 435
9 PRIOR APPLICATION DATA:
10 APPLICATION NUMBER: 08/100,708
11 FILING DATE: July 29, 1993
12 ATTORNEY/AGENT INFORMATION:
13 NAME: Wong, Mean Khing
14 REGISTRATION NUMBER: 33,561
15 REFERENCE/DOCKET NUMBER: 5324.US.P1
16 TELECOMMUNICATION INFORMATION:
17 TELEPHONE: (708) 938-3517
18 TELEFAX: (708) 938-2623
19 TELEX:
20 INFORMATION FOR SEQ ID NO: 24:
21 SEQUENCE CHARACTERISTICS:
22 LENGTH: 15 amino acid residues
23 TYPE: amino acid
24 STRANDEDNESS:
25 TOPOLOGY: unknown
26 MOLECULE TYPE: peptide
27 ORIGINAL SOURCE:
28 ORGANISM:
29 US-08-657-392-24
30
31 Query Match 80.5%; Score 62; DB 2; Length 15;
32 Best Local Similarity 100.0%; Pred.No.0.0019;
33 Matches 12; Conservative 0; Mismatches 0; Indels
34
35 QY 1 RIQGGGGRFVT 12
36 DB 3 RIQGGGGRFVT 14
37
38 RESULT 203
39 PCT-US94-02539-24
40 Sequence 24, Application PC/TUS9402539
41 GENERAL INFORMATION:
42 APPLICANT: Brate, E.M.
43 APPLICANT: Brennan, C.A.
44 APPLICANT: Bridon, D.P.
45 APPLICANT: Jaffe, K.D.
46 APPLICANT: Krafft, G.A.
47 APPLICANT: Mandeck, W.
48 APPLICANT: March, S.C.
49 APPLICANT: Russell, J.R.
50 APPLICANT: Yue, V.T.
51 TITLE OF INVENTION: Genetically Engineered Enzymes
52 TITLE OF INVENTION: And Their
53 TITLE OF INVENTION: Conjugates For Diagnostic Assays
54 NUMBER OF SEQUENCES: 34
55 CORRESPONDENCE ADDRESS:
56 ADDRESSEE: ABBOTT LABORATORIES
57 STREET: One Abbott Park Road
58 CITY: Abbott Park
59 STATE: Illinois
60 COUNTRY: USA
61 ZIP: 60064-3500
62 COMPUTER READABLE FORM:
63 MEDIUM TYPE: Floppy disk
64 COMPUTER: IBM PC compatible
65 OPERATING SYSTEM: PC-DOS/MS-DOS
66 SOFTWARE: SoftPC
67 CURRENT APPLICATION DATA:
68 APPLICATION NUMBER: PCT/US94/02539
69 FILING DATE:
70 CLASSIFICATION:
71 ATTORNEY/AGENT INFORMATION:

```

```
/ NAME: Wong, Wean Khing
/ REGISTRATION NUMBER: 33,561
/ REFERENCE/DOCKET NUMBER: 5324.PC.01
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (708) 938-3517
/ TELEFAX: (708) 938-2623
/ TELEX:
/ INFORMATION FOR SEQ ID NO: 24:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 15 amino acid residues
/ TYPE: amino acid
/ STRANDEDNESS:
/ TOPOLOGY: unknown
/ MOLECULE TYPE: peptide
/ ORIGINAL SOURCE:
/ ORGANISM:
/ PCT-US94-02539-24

Query Match      80.5%; Score 62; DB 5; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.0019;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RIORGPGRAFTV 12
Db      3 RIORGPGRAFTV 14

RESULT 204
US-08-973-551-24
; Sequence 24, Application US/08973551
; Patent No. 6113902
; GENERAL INFORMATION:
; APPLICANT: Chermann, Jean-Claude
; APPLICANT: Le Contel, Carole
; APPLICANT: Galea, Pascale
; TITLE OF INVENTION: VACCINE AGAINST INFECTION AGENTS HAVING
; TITLE OF INVENTION: AN INTRACELLULAR PHASE, COMPOSITION FOR THE TREATMENT AND
; TITLE OF INVENTION: PREVENTION OF HIV INFECTIONS, ANTIBODIES AND METHOD OF
; TITLE OF INVENTION: DIAGNOSIS
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Foley & Lardner
; STREET: 3000 K Street, N.W., Suite 500
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/973,551
; FILING DATE: 30-DEC-1997
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/FR96/01006
; FILING DATE: 28-JUN-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: FR 9507914
; FILING DATE: 30-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Granados, Patricia D.
; REGISTRATION NUMBER: 33,683
; REFERENCE/DOCKET NUMBER: 65691/130
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202)672-5300
; TELEFAX: (202)672-5399
; TELEX: 904136
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 amino acids
```

```
/ TYPE: amino acid
/ STRANDEDNESS:
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
/ US-08-973-551-24

Query Match      80.5%; Score 62; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.0025;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RIORGPGRAFTV 12
Db      9 RIORGPGRAFTV 20

RESULT 205
US-08-657-392-27
; Sequence 27, Application US/08657392
; Patent No. 5843634
; GENERAL INFORMATION:
; APPLICANT: Brate, E.M.
; APPLICANT: Brennan, C.A.
; APPLICANT: Bridon, D.P.
; APPLICANT: Jaffe, K.D.
; APPLICANT: Krafft, G.A.
; APPLICANT: Mandeckl, W.
; APPLICANT: March, S.C.
; APPLICANT: Russell, J.R.
; APPLICANT: Yue, V.T.
; TITLE OF INVENTION: Genetically Engineered Enzymes And Their
; TITLE OF INVENTION: Conjugates For Diagnostic Assays
; NUMBER OF SEQUENCES: 34
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ABBOTT LABORATORIES
; STREET: One Abbott Park Road
; CITY: Abbott Park
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60064-3500
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: SoftPC
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/657,392
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/100,708
; FILING DATE: July 29, 1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Wong, Wean Khing
; REGISTRATION NUMBER: 33,561
; REFERENCE/DOCKET NUMBER: 5324.US.P1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (708) 938-3517
; TELEFAX: (708) 938-2623
; TELEX:
; INFORMATION FOR SEQ ID NO: 27:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 23 amino acid residues
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: unknown
; MOLECULE TYPE: peptide
; ORIGINAL SOURCE:
; ORGANISM:
; US-08-657-392-27

Query Match      80.5%; Score 62; DB 2; Length 23;
Best Local Similarity 100.0%; Pred. No. 0.0029;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

Qy 1 RIQGPGRFVTT 12  
Db 12 RIQGPGRFVTT 23

## RESULT 206

PCT-US94-02539-27

; Sequence 27, Application PC/TUS9402539  
; GENERAL INFORMATION:  
; APPLICANT: Brate, E.M.  
; APPLICANT: Brennan, C.A.  
; APPLICANT: Bridon, D.P.  
; APPLICANT: Jaffe, K.D.  
; APPLICANT: Krafft, G.A.  
; APPLICANT: Mandeck, W.  
; APPLICANT: March, S.C.  
; APPLICANT: Russell, J.R.  
; APPLICANT: Yue, V.T.  
; TITLE OF INVENTION: Genetically Engineered Enzymes  
; TITLE OF INVENTION: And Their  
; TITLE OF INVENTION: Conjugates For Diagnostic Assays  
; NUMBER OF SEQUENCES: 34  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: ABBOTT LABORATORIES  
; STREET: One Abbott Park Road  
; CITY: Abbott Park  
; STATE: Illinois  
; COUNTRY: USA  
; ZIP: 60064-3500  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: SoftPC  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US94/02539  
; FILING DATE:  
; CLASSIFICATION:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Wong, Mean Khing  
; REGISTRATION NUMBER: 33,561  
; REFERENCE/DOCKET NUMBER: S324.PC.01  
; TELEPHONE: (708) 938-3517  
; TELEFAX: (708) 938-2623  
; TELEX:  
; INFORMATION FOR SEQ ID NO: 27:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 23 amino acid residues  
; TYPE: amino acid  
; STRANDEDNESS:  
; TOPOLOGY: unknown  
; MOLECULE TYPE: peptide  
; ORIGINAL SOURCE:  
; ORGANISM:  
; PCT-US94-02539-27

Query Match 80.5%; Score 62; DB 5; Length 23;  
Best Local Similarity 100.0%; Pred. No. 0.0029;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGPGRFVTT 12  
Db 12 RIQGPGRFVTT 23

## RESULT 207

US-07-847-311A-20  
; Sequence 20, Application US/07847311A  
; Patent No. 5976541  
; GENERAL INFORMATION:  
; APPLICANT: Berzofsky, Jay A.

; APPLICANT: Takeshita, Toshiyuki  
; APPLICANT: Shirai, Mutsunori  
; APPLICANT: Pendleton, C.D.  
; APPLICANT: Koslowski, Steven  
; APPLICANT: Margulies, David H.  
; TITLE OF INVENTION: Potent Peptide for Stimulation of  
; TITLE OF INVENTION: Cytotoxic T Lymphocytes Specific for the HIV-I Envelope  
; NUMBER OF SEQUENCES: 20  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Birch, Stewart, Kolash & Birch  
; STREET: 301 N. Washington  
; CITY: Falls Church  
; STATE: Virginia  
; COUNTRY: USA  
; ZIP: 22046-0747  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/07/847,311A  
; FILING DATE: 06-MAR-1992  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Svensson, Leonard R.  
; REGISTRATION NUMBER: 30,330  
; REFERENCE/DOCKET NUMBER: 1173-392P  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-241-1300  
; TELEFAX: 703-241-2848  
; INFORMATION FOR SEQ ID NO: 20:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 13 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; HYPOTHETICAL: NO  
; FRAGMENT TYPE: internal  
; ORIGINAL SOURCE:  
; ORGANISM: Human Immunodeficiency Virus Type I  
; STRAIN: IIIB  
; FEATURE:  
; NAME/KEY: Peptide  
; LOCATION: 1..13  
; OTHER INFORMATION: /label= peptide  
; OTHER INFORMATION: /note= "Active peptide of HIV-I envelope  
; OTHER INFORMATION: from strain IIIB"  
US-07-847-311A-20

Query Match 79.2%; Score 61; DB 2; Length 13;  
Best Local Similarity 100.0%; Pred. No. 0.0024;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 IQRGPGRFVTT 13  
Db 2 IQRGPGRFVTT 13

## RESULT 208

US-08-111-080-6  
; Sequence 6, Application 08/111080  
; Patent No. 5558865  
; GENERAL INFORMATION:  
; APPLICANT: Ohno, Tsuneoya  
; TITLE OF INVENTION: HIV Immunotherapeutics  
; NUMBER OF SEQUENCES: 38  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &  
; STREET: 6300 Sears Tower, 233 S. Wacker Drive  
; CITY: Chicago  
; STATE: Illinois

glycoprot

```
/ COUNTRY: USA
/ ZIP: 60606
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patent In Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: 08/111,080
/ FILING DATE:
/ CLASSIFICATION: 424
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 07/748,562
/ FILING DATE: 22-APR-1991
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: PCT/US92/07111
/ FILING DATE: 24-AUG-1992
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/039,457
/ FILING DATE: 22-APR-1993
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Borun, Michael F.
/ REGISTRATION NUMBER: 25,447
/ REFERENCE/DOCKET NUMBER: 31629
/ TELEPHONE: (312) 474-6300
/ TELEFAX: (312) 474-0448
/ TELEX: 25-3856
/ INFORMATION FOR SEQ ID NO: 6:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 14 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
/ US-08-111-080-6

Query Match 77.9%; Score 60; DB 1; Length 14;
Best Local Similarity 85.7%; Pred. No. 0.0037;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 2 IORGPGRAFTVIGK 15
Db 1 IRIGPGRAFTVIGK 14

RESULT 209
US-08-211-980-6
/ Sequence 6, Application US/08211980
/ Patent No. 565569
/ GENERAL INFORMATION:
/ APPLICANT: Ohno, Tsuneva
/ TITLE OF INVENTION: HIV Immunotherapeutics
/ NUMBER OF SEQUENCES: 38
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
/ STREET: 6300 Sears Tower, 233 S. Wacker Drive
/ CITY: Chicago
/ STATE: Illinois
/ COUNTRY: USA
/ ZIP: 60606
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patent In Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/211,980
/ FILING DATE:
/ CLASSIFICATION: 424
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: PCT/US92/07111
/ FILING DATE: 24-AUG-1992
```

```
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/039,457
/ FILING DATE: 22-APR-1993
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Borun, Michael F.
/ REGISTRATION NUMBER: 25,447
/ REFERENCE/DOCKET NUMBER: 31629
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (312) 474-6300
/ TELEFAX: (312) 474-0448
/ TELEX: 25-3856
/ INFORMATION FOR SEQ ID NO: 6:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 14 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
/ US-08-211-980-6

Query Match 77.9%; Score 60; DB 1; Length 14;
Best Local Similarity 85.7%; Pred. No. 0.0037;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 2 IORGPGRAFTVIGK 15
Db 1 IRIGPGRAFTVIGK 14

RESULT 210
PCT-US92-07111-6
/ Sequence 6, Application PC/TUS9207111
/ GENERAL INFORMATION:
/ APPLICANT: Ohno, Tsuneva
/ TITLE OF INVENTION: HIV Immunotherapeutics
/ NUMBER OF SEQUENCES: 17
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
/ ADDRESSEE: Bicknell
/ STREET: Two First National Plaza, 20 South Clark
/ STREET: Street
/ CITY: Chicago
/ STATE: Illinois
/ COUNTRY: USA
/ ZIP: 60603
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patent In Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: PCT/US92/07111
/ FILING DATE: 19920824
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 07/748,562
/ FILING DATE: 22-AUG-1991
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Noland, Greta E.
/ REGISTRATION NUMBER: 35,302
/ REFERENCE/DOCKET NUMBER: 31016
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (312) 346-5750
/ TELEFAX: (312) 984-9740
/ TELEX: 25-3856
/ INFORMATION FOR SEQ ID NO: 6:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 14 amino acids
/ TYPE: AMINO ACID
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
/ PCT-US92-07111-6

Query Match 77.9%; Score 60; DB 5; Length 14;
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Best Local Similarity 85.7%; Pred. No. 0.0037; Mismatches 1; Indels 0; Gaps 0;

QY 2 IORGPGRAFTVIGK 15  
DB 1 IRIGPGRAFTVIGK 14

## RESULT 211

PCT-US93-07967-6  
; Sequence 6, Application PC/TUS9307967  
; GENERAL INFORMATION:  
; APPLICANT: Onno, Teuneya  
; TITLE OF INVENTION: HIV Immunotherapeutics  
; NUMBER OF SEQUENCES: 38  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Marehall, O'Toole, Gerstein, Murray &  
; ADDRESS: Borun  
; CITY: Chicago  
; STATE: Illinois  
; COUNTRY: USA  
; ZIP: 60606  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US93/07967  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US92/07111  
; FILING DATE: 24-AUG-1992  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/039,457  
; FILING DATE: 22-APR-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Borun, Michael F.  
; REGISTRATION NUMBER: 25,447  
; REFERENCE/DOCKET NUMBER: 31629  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (312) 474-6300  
; TELEFAX: (312) 474-0448  
; TELEX: 25-3856  
; INFORMATION FOR SEQ ID NO: 6:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 14 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
PCT-US93-07967-6

Query Match 77.9%; Score 60; DB 5; Length 14;  
Best Local Similarity 85.7%; Pred. No. 0.0037;  
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 IORGPGRAFTVIGK 15  
DB 1 IRIGPGRAFTVIGK 14

## RESULT 212

US-08-704-170-73  
; Sequence 73, Application US/08704170  
; Patent No. 5707626  
; GENERAL INFORMATION:  
; APPLICANT: Douvas, Angeline  
; APPLICANT: Takehana, Yoshi  
; APPLICANT: Ehresmann, Glenn  
; TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
; IMMUNOINFECTION: IMMUNOINFECTION CLUSTER VIRUS INFECTIONS

; NUMBER OF SEQUENCES: 121  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Robbins, Berliner & Carson  
; STREET: 201 No. 5707626th Figueroa Street, Suite 500  
; CITY: Los Angeles  
; STATE: California  
; COUNTRY: U.S.A.  
; ZIP: 90012  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/704,170  
; FILING DATE:  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/029,850  
; FILING DATE: 11-MAR-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Spitals, John P.  
; REGISTRATION NUMBER: 29,215  
; REFERENCE/DOCKET NUMBER: 1920-331  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (213) 977-1001  
; TELEFAX: (213) 977-1003  
; INFORMATION FOR SEQ ID NO: 73:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 11 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-08-704-170-73

Query Match 75.3%; Score 58; DB 1; Length 11;  
Best Local Similarity 100.0%; Pred. No. 0.006;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTIG 14  
DB 1 RGPGRFVTIG 11

## RESULT 213

US-08-704-170-74  
; Sequence 74, Application US/08704170  
; Patent No. 5707626  
; GENERAL INFORMATION:  
; APPLICANT: Douvas, Angeline  
; APPLICANT: Takehana, Yoshi  
; APPLICANT: Ehresmann, Glenn  
; TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
; IMMUNOINFECTION: IMMUNOINFECTION CLUSTER VIRUS INFECTIONS  
; NUMBER OF SEQUENCES: 121  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Robbins, Berliner & Carson  
; STREET: 201 No. 5707626th Figueroa Street, Suite 500  
; CITY: Los Angeles  
; STATE: California  
; COUNTRY: U.S.A.  
; ZIP: 90012  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/704,170  
; FILING DATE:  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/029,850

/ FILING DATE: 11-MAR-1993  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: Spitals, John P.  
/ REGISTRATION NUMBER: 29,215  
/ REFERENCE/DOCKET NUMBER: 1920-331  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (213) 977-1001  
/ TELEFAX: (213) 977-1003  
/ INFORMATION FOR SEQ ID NO: 74:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 11 amino acids  
/ TYPE: amino acid  
/ TOPOLOGY: linear  
/ MOLECULE TYPE: peptide  
/ PCT-US94-02631-73  
/ US-08-704-170-74

Query Match 75.3%; Score 58; DB 1; Length 11;  
Best Local Similarity 100.0%; Pred. No. 0.006;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTVIG 14  
| | | | | | | | | | | |  
Db 1 RGPGRFVTVIG 11

RESULT 214  
PCT-US94-02631-73  
; Sequence 73, Application PC/TUS9402631  
; GENERAL INFORMATION:  
; APPLICANT: Douvas, Angeline  
; APPLICANT: Takehana, Yoshi  
; APPLICANT: Ehreman, Glenn  
; TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
; NUMBER OF SEQUENCES: 121  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Robbins, Berliner & Carson  
; STREET: 201 North Figueroa Street, Suite 500  
; CITY: Los Angeles  
; STATE: California  
; COUNTRY: U.S.A.  
; ZIP: 90012  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US94/02631  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/029,850  
; FILING DATE: 11-MAR-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Spitals, John P.  
; REGISTRATION NUMBER: 29,215  
; REFERENCE/DOCKET NUMBER: 1920-331  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (213) 977-1001  
; TELEFAX: (213) 977-1003  
; INFORMATION FOR SEQ ID NO: 73:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 11 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; PCT-US94-02631-73

Query Match 75.3%; Score 58; DB 5; Length 11;  
Best Local Similarity 100.0%; Pred. No. 0.006;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTVIG 14  
| | | | | | | | | | | |  
Db 1 RGPGRFVTVIG 11

RESULT 216  
US-08-090-148-5  
; Sequence 5, Application US/08090148  
; Patent No. 5534257  
; GENERAL INFORMATION:  
; APPLICANT: Mastico, Robert Allan  
; APPLICANT: Stockley, Peter George  
; APPLICANT: Talbot, Simon John  
; TITLE OF INVENTION: Antigen-Presenting Capsid with  
; NUMBER OF SEQUENCES: 6  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Rosenman & Collin  
; STREET: 575 Madison Avenue  
; CITY: New York

QY 4 RGPGRFVTVIG 14  
| | | | | | | | | | | |  
Db 1 RGPGRFVTVIG 11

RESULT 215  
PCT-US94-02631-74  
; Sequence 74, Application PC/TUS9402631  
; GENERAL INFORMATION:  
; APPLICANT: Douvas, Angeline  
; APPLICANT: Takehana, Yoshi  
; APPLICANT: Ehreman, Glenn  
; TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
; NUMBER OF SEQUENCES: 121  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Robbins, Berliner & Carson  
; STREET: 201 North Figueroa Street, Suite 500  
; CITY: Los Angeles  
; STATE: California  
; COUNTRY: U.S.A.  
; ZIP: 90012  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US94/02631  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/029,850  
; FILING DATE: 11-MAR-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Spitals, John P.  
; REGISTRATION NUMBER: 29,215  
; REFERENCE/DOCKET NUMBER: 1920-331  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (213) 977-1001  
; TELEFAX: (213) 977-1003  
; INFORMATION FOR SEQ ID NO: 74:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 11 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; PCT-US94-02631-74

Query Match 75.3%; Score 58; DB 5; Length 11;  
Best Local Similarity 100.0%; Pred. No. 0.006;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTVIG 14  
| | | | | | | | | | | |  
Db 1 RGPGRFVTVIG 11

RESULT 216  
US-08-090-148-5  
; Sequence 5, Application US/08090148  
; Patent No. 5534257  
; GENERAL INFORMATION:  
; APPLICANT: Mastico, Robert Allan  
; APPLICANT: Stockley, Peter George  
; APPLICANT: Talbot, Simon John  
; TITLE OF INVENTION: Antigen-Presenting Capsid with  
; NUMBER OF SEQUENCES: 6  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Rosenman & Collin  
; STREET: 575 Madison Avenue  
; CITY: New York

```
; STATE: NY
; COUNTRY: U.S.A.
; ZIP: 10022-2585
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.5", 1.44Mb
; COMPUTER: IBM PS2-485
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/090,148
; FILING DATE: 08/11/93
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 9101550.3
; FILING DATE: 01/24/91
; APPLICATION NUMBER: PCT/GB92/00124
; FILING DATE: 01/22/92
; ATTORNEY/AGENT INFORMATION:
; NAME: Nissenbaum, Israel
; REGISTRATION NUMBER: 27,582
; REFERENCE/DOCKET NUMBER:
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 940-8636
; TELEFAX: (212) 940-6404
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 AMINO ACIDS
; TYPE: AMINO ACID
; TOPOLOGY: NOT RELEVANT
; MOLECULE TYPE: PEPTIDE
; US-08-090-148-5

Query Match 75.3%; Score 58; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.007;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GPGRFVTVIGK 15
Db 1 GPGRFVTVIGK 11

RESULT 217
US-07-920-281C-10
; Sequence 10, Application US/07920281C
; Patent No. 5739026
; GENERAL INFORMATION:
; APPLICANT: Garoff, Henrik
; ATTORNEY/AGENT INFORMATION:
; NAME: Liljestrom, Peter
; TITLE OF INVENTION: DNA Expression Systems Based on
; Moleculs of Sequences: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolasch & Birch
; STREET: P.O. Box 747
; CITY: Falls Church
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22040-0747
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/920,281C
; FILING DATE: 13-AUG-1992
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Murphy Jr., Gerald M.
; REGISTRATION NUMBER: 28,977
; REFERENCE/DOCKET NUMBER: 828-103P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-241-1300

Query Match 75.3%; Score 58; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 0.0081;
Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQRPGRFVTVI 13
Db 3 RIQRPGRFVTVI 15

us-08-869-386-1.ra1

; STATE: NY
; COUNTRY: U.S.A.
; ZIP: 10022-2585
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.5", 1.44Mb
; COMPUTER: IBM PS2-485
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/090,148
; FILING DATE: 08/11/93
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 9101550.3
; FILING DATE: 01/24/91
; APPLICATION NUMBER: PCT/GB92/00124
; FILING DATE: 01/22/92
; ATTORNEY/AGENT INFORMATION:
; NAME: Nissenbaum, Israel
; REGISTRATION NUMBER: 27,582
; REFERENCE/DOCKET NUMBER:
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 940-8636
; TELEFAX: (212) 940-6404
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 AMINO ACIDS
; TYPE: AMINO ACID
; TOPOLOGY: NOT RELEVANT
; MOLECULE TYPE: PEPTIDE
; US-08-090-148-5

Query Match 75.3%; Score 58; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.007;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GPGRFVTVIGK 15
Db 1 GPGRFVTVIGK 11

RESULT 217
US-07-920-281C-10
; Sequence 10, Application US/07920281C
; Patent No. 5739026
; GENERAL INFORMATION:
; APPLICANT: Garoff, Henrik
; ATTORNEY/AGENT INFORMATION:
; NAME: Liljestrom, Peter
; TITLE OF INVENTION: DNA Expression Systems Based on
; Moleculs of Sequences: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolasch & Birch
; STREET: P.O. Box 747
; CITY: Falls Church
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22040-0747
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/920,281C
; FILING DATE: 13-AUG-1992
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Murphy Jr., Gerald M.
; REGISTRATION NUMBER: 28,977
; REFERENCE/DOCKET NUMBER: 828-103P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-241-1300

Query Match 75.3%; Score 58; DB 3; Length 15;
Best Local Similarity 84.6%; Pred. No. 0.0081;
Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQRPGRFVTVI 13
Db 3 RIQRPGRFVTVI 15

US-07-920-281C-10
; Sequence 10, Application US/08466277
; Patent No. 6190566
; GENERAL INFORMATION:
; APPLICANT: Garoff, Henrik
; ATTORNEY/AGENT INFORMATION:
; NAME: Liljestrom, Peter
; TITLE OF INVENTION: DNA Expression Systems Based on
; Moleculs of Sequences: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolasch & Birch
; STREET: P.O. Box 747
; CITY: Falls Church
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22040-0747
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/466,277
; FILING DATE: 06-Jun-1995
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/920,281
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Murphy Jr., Gerald M.
; REGISTRATION NUMBER: 28,977
; REFERENCE/DOCKET NUMBER: 828-103P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-241-1300
; TELEFAX: 703-241-2848
; TELEX: 248345
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 10:
US-08-466-277-10

Query Match 75.3%; Score 58; DB 3; Length 15;
Best Local Similarity 84.6%; Pred. No. 0.0081;
Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQRPGRFVTVI 13
Db 3 RIQRPGRFVTVI 15
```

RESULT 219  
US-09-688-842-10  
; Sequence 10, Application US/09688842  
; Patent No. 6770283  
; GENERAL INFORMATION:  
; APPLICANT: Garoff, Henrik  
; ; Liljestrom, Peter  
; TITLE OF INVENTION: DNA Expression Systems Based on  
; ; Alphaviruses  
; NUMBER OF SEQUENCES: 27  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Birch, Stewart, Kolasch & Birch  
; STREET: P.O. Box 747  
; CITY: Falls Church  
; STATE: Virginia  
; COUNTRY: USA  
; ZIP: 22040-0747  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/688,842  
; FILING DATE: 17-Oct-2000  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/466,277  
; FILING DATE: <Unknown>  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Murphy Jr., Gerald M.  
; REGISTRATION NUMBER: 28,977  
; REFERENCE/DOCKET NUMBER: 828-103P  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-241-1300  
; TELEFAX: 703-241-2848  
; TELEX: 248345  
; INFORMATION FOR SEQ ID NO: 10:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; SEQUENCE DESCRIPTION: SEQ ID NO: 10:  
US-09-688-842-10

Query Match 75.3%; Score 58; DB 4; Length 15;  
Best Local Similarity 84.6%; Pred. No. 0.0081;  
Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFTV 13  
Db 3 RIQPGGRAFVEL 15

RESULT 220  
PCT-US92-06688-14  
; Sequence 14, Application PC/TUS9206688  
; GENERAL INFORMATION:  
; APPLICANT: REPLIGEN CORPORATION  
; TITLE OF INVENTION: THE ROCKEFELLER UNIVERSITY  
; TITLE OF INVENTION: MULTIPLE ANTIGEN PEPTIDES FOR USE AS HIV  
; NUMBER OF SEQUENCES: 21  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Fish & Richardson  
; STREET: 225 Franklin Street  
; CITY: Boston  
; STATE: Massachusetts  
; COUNTRY: U.S.A.  
; ZIP: 02110-2804  
; COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
COMPUTER: IBM PS/2 Model 50Z or 55SX  
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)  
SOFTWARE: WordPerfect (Version 5.1)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US92/06688  
FILING DATE: 19920811  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 744,281  
FILING DATE: 13 August 1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Paul T. Clark  
REGISTRATION NUMBER: 30,162  
REFERENCE/DOCKET NUMBER: 00231/052WO1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (617) 542-5070  
TELEFAX: (617) 542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 14:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 11  
TYPE: AMINO ACID  
TOPOLOGY: linear  
PCT-US92-06688-14  
Query Match 74.0%; Score 57; DB 5; Length 11;  
Best Local Similarity 100.0%; Pred. No. 0.0086;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 RIQPGGRAFV 11  
Db 1 RIQPGGRAFV 11  
RESULT 221  
US-08-704-170-70  
; Sequence 70, Application US/08704170  
; Patent No. 5707626  
; GENERAL INFORMATION:  
; APPLICANT: Douvas, Angelina  
; APPLICANT: Takehana, Yoshi  
; APPLICANT: Ehresmann, Glenn  
; TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
; NUMBER OF SEQUENCES: 121  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Robbins, Berliner & Carson  
; STREET: 201 No. 5707626th Figueroa Street, Suite 500  
; CITY: Los Angeles  
; STATE: California  
; COUNTRY: U.S.A.  
; ZIP: 90012  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/704,170  
FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/029,850  
FILING DATE: 11-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Spitals, John P.  
REGISTRATION NUMBER: 29,215  
REFERENCE/DOCKET NUMBER: 1920-331  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 977-1001  
TELEFAX: (213) 977-1003  
INFORMATION FOR SEQ ID NO: 70:

SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-704-170-70

Query Match 74.0%; Score 57; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.012;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFY 11  
Db 5 RIQPGGRAFY 15

RESULT 222  
PCT-US94-02631-70  
; Sequence 70, Application PC/TUS9402631  
; GENERAL INFORMATION:  
; APPLICANT: Douvas, Angeline  
; APPLICANT: Takehana, Yoshi  
; APPLICANT: Ehresmann, Glenn  
; TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
; IMMUNOINFECTIVE CLUSTER VIRUS INFECTIONS  
; NUMBER OF SEQUENCES: 121  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Robbins, Berliner & Carson  
; STREET: 201 North Figueroa Street, Suite 500  
; CITY: Los Angeles  
; STATE: California  
; COUNTRY: U.S.A.  
; ZIP: 90012  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US94/02631  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/029,850  
; FILING DATE: 11-MAR-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Spitals, John P.  
; REGISTRATION NUMBER: 29,215  
; REFERENCE/DOCKET NUMBER: 1920-331  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (213) 977-1001  
; TELEFAX: (213) 977-1003  
; INFORMATION FOR SEQ ID NO: 70:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
PCT-US94-02631-70

Query Match 74.0%; Score 57; DB 5; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.012;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFY 11  
Db 5 RIQPGGRAFY 15

RESULT 223  
US-07-920-281C-12  
; Sequence 12, Application US/07920281C  
; Patent No. 5739026

GENERAL INFORMATION:  
APPLICANT: Garoff, Henrik  
APPLICANT: Liljestrom, Peter  
TITLE OF INVENTION: DNA Expression Systems Based on  
TITLE OF INVENTION: Alphaviruses  
NUMBER OF SEQUENCES: 27  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/07/920,281C  
FILING DATE: 13-AUG-1992  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Murphy Jr., Gerald M.  
REGISTRATION NUMBER: 28,977  
REFERENCE/DOCKET NUMBER: 828-103P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-241-1300  
TELEFAX: 703-241-2848  
TELEX: 248345

INFORMATION FOR SEQ ID NO: 12:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 17 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-07-920-281C-12

Query Match 74.0%; Score 57; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 0.013;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGRAFY 11  
Db 4 RIQPGGRAFY 14

RESULT 224  
US-08-466-277-12  
; Sequence 12, Application US/08466277  
; Patent No. 6190666  
; GENERAL INFORMATION:  
; APPLICANT: Garoff, Henrik  
; APPLICANT: Liljestrom, Peter  
; TITLE OF INVENTION: DNA Expression Systems Based on  
; Alphaviruses  
; NUMBER OF SEQUENCES: 27  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Birch, Stewart, Kolasch & Birch  
; STREET: P.O. Box 747  
; CITY: Falls Church  
; STATE: Virginia  
; COUNTRY: USA  
; ZIP: 22040-0747

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/466,277  
FILING DATE: 06-Jun-1995  
CLASSIFICATION: <Unknown>

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/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 07/920,281
/ FILING DATE: <Unknown>
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Murphy Jr., Gerald M.
/ REGISTRATION NUMBER: 28,977
/ REFERENCE/DOCKET NUMBER: 828-103P
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 703-241-1300
/ TELEFAX: 703-241-2848
/ TELEX: 248345
/ INFORMATION FOR SEQ ID NO: 12:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 17 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ SEQUENCE DESCRIPTION: SEQ ID NO: 12:
US-08-466-277-12
Query Match 74.0%; Score 57; DB 3; Length 17;
Best Local Similarity 100.0%; Pred. No. 0.013;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RIQGPGRFV 11
Db 4 RIQGPGRFV 14
RESULT 225
US-09-688-842-12
/ Sequence 12, Application US/09688842
/ Patent No. 6770283
/ GENERAL INFORMATION:
/ APPLICANT: Garoff, Henrik
/ TITLE OF INVENTION: DNA Expression Systems Based on
/ Alphaviruses
/ NUMBER OF SEQUENCES: 27
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Birch, Stewart, Kolaach & Birch
/ STREET: P.O. Box 747
/ CITY: Falls Church
/ STATE: Virginia
/ COUNTRY: USA
/ ZIP: 22040-0747
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/688,842
/ FILING DATE: 17-Oct-2000
/ CLASSIFICATION: <Unknown>
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 08/466,277
/ FILING DATE: <Unknown>
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Murphy Jr., Gerald M.
/ REGISTRATION NUMBER: 28,977
/ REFERENCE/DOCKET NUMBER: 828-103P
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 703-241-1300
/ TELEFAX: 703-241-2848
/ TELEX: 248345
/ INFORMATION FOR SEQ ID NO: 12:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 17 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ SEQUENCE DESCRIPTION: SEQ ID NO: 12:
US-09-688-842-12
Query Match 74.0%; Score 57; DB 4; Length 17;
Best Local Similarity 100.0%; Pred. No. 0.013;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RIQGPGRFV 11
Db 4 RIQGPGRFV 14
RESULT 226
US-08-257-528B-16
/ Sequence 16, Application US/08257528B
/ Patent No. 5639854
/ GENERAL INFORMATION:
/ APPLICANT: SIA, Charles D.Y.
/ APPLICANT: CHONG, Pele
/ APPLICANT: KLEIN, Michel H.
/ TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides
/ NUMBER OF SEQUENCES: 101
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Sim & McBurney
/ STREET: Suite 701, 330 University Avenue
/ CITY: Toronto
/ STATE: Ontario
/ COUNTRY: Canada
/ ZIP: M5G 1R7
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/257,528B
/ FILING DATE: 09-JUN-1994
/ CLASSIFICATION: 424
/ ATTORNEY/AGENT INFORMATION:
/ NAME: STEWART, MICHAEL I.
/ REGISTRATION NUMBER: 24,973
/ REFERENCE/DOCKET NUMBER: 1038-336 MIS:jb
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (416) 595-1155
/ TELEFAX: (416) 595-1163
/ INFORMATION FOR SEQ ID NO: 16:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 21 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ US-08-257-528B-16
Query Match 74.0%; Score 57; DB 1; Length 21;
Best Local Similarity 91.7%; Pred. No. 0.016;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 RIQGPGRFV 12
Db 7 RIQGPGRFV 18
RESULT 227
US-08-460-602A-16
/ Sequence 16, Application US/08460602A
/ Patent No. 5759769
/ GENERAL INFORMATION:
/ APPLICANT: SIA, Charles D.Y.
/ APPLICANT: CHONG, Pele
/ APPLICANT: KLEIN, Michel H.
/ TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides
/ NUMBER OF SEQUENCES: 101
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Sim & McBurney
```

```

; STREET: Suite 701, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5G 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/460,602A
; FILING DATE: 02-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/257,528
; FILING DATE: 09-JUN-1994
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/073,378
; FILING DATE: 09-JUN-1993
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, MICHAEL I.
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-450 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-460-602A-16

Query Match          74.0%; Score 57; DB 1; Length 21;
Best Local Similarity 91.7%; Pred. No. 0.016;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQGPGRFVTV 12
Db 7 RIQGPGRFVTV 18

RESULT 228
US-08-463-966A-16
; Sequence 16, Application US/08463966A
; Patent No. 5795955
; GENERAL INFORMATION:
; APPLICANT: SIA, Charles D.Y.
; APPLICANT: CHONG, Pele
; APPLICANT: KLEIN, Michel H.
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides
; NUMBER OF SEQUENCES: 101
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: Suite 701, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5G 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/463,966A
; FILING DATE: 05-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:

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; APPLICATION NUMBER: 08/257,528
; FILING DATE: 09-JUN-1994
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/073,378
; FILING DATE: 09-JUN-1993
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, MICHAEL I.
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-487 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1153
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-463-966A-16

Query Match          74.0%; Score 57; DB 1; Length 21;
Best Local Similarity 91.7%; Pred. No. 0.016;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQGPGRFVTV 12
Db 7 RIQGPGRFVTV 18

RESULT 229
US-08-465-217A-16
; Sequence 16, Application US/08465217A
; Patent No. 5800822
; GENERAL INFORMATION:
; APPLICANT: SIA, Charles D.Y.
; APPLICANT: CHONG, Pele
; APPLICANT: KLEIN, Michel H.
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides
; NUMBER OF SEQUENCES: 101
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: Suite 701, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5G 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/465,217A
; FILING DATE: 05-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/257,528
; FILING DATE: 09-JUN-1994
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/073,378
; FILING DATE: 09-JUN-1993
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, MICHAEL I.
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-486 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1153
; INFORMATION FOR SEQ ID NO: 16:

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; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-465-217A-16

Query Match          74.0%; Score 57; DB 1; Length 21;
Best Local Similarity 91.7%; Pred. No. 0.016;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQGPGRFVFT 12
Db 7 RIQGPGRFVFT 18

RESULT 230
US-08-464-329A-16
; Sequence 16, Application US/08464329A
; Patent No. 5817754
; GENERAL INFORMATION:
; APPLICANT: SIA, Charles D.Y.
; APPLICANT: CHONG, Pele
; APPLICANT: KLEIN, Michel H.
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides
; NUMBER OF SEQUENCES: 101
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: Suite 701, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5G 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/464,329A
; FILING DATE: 05-JUN-1994
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/073,378
; FILING DATE: 09-JUN-1993
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, MICHAEL I.
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-449 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1153
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-464-329A-16

Query Match          74.0%; Score 57; DB 2; Length 21;
Best Local Similarity 91.7%; Pred. No. 0.016;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQGPGRFVFT 12
Db 7 RIQGPGRFVFT 18

RESULT 231
US-08-462-507A-16
; Sequence 16, Application US/08462507A
; Patent No. 5876731
; GENERAL INFORMATION:
; APPLICANT: SIA, Charles D.Y.
; APPLICANT: CHONG, Pele
; APPLICANT: KLEIN, Michel H.
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides
; NUMBER OF SEQUENCES: 101
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: Suite 701, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5G 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/462,507A
; FILING DATE: 05-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/257,528
; FILING DATE: 09-JUN-1994
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/073,378
; FILING DATE: 09-JUN-1993
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, MICHAEL I.
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-451 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1153
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-462-507A-16

Query Match          74.0%; Score 57; DB 2; Length 21;
Best Local Similarity 91.7%; Pred. No. 0.016;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQGPGRFVFT 12
Db 7 RIQGPGRFVFT 18

RESULT 232
US-08-467-881A-16
; Sequence 16, Application US/08467881A
; Patent No. 5951986
; GENERAL INFORMATION:
; APPLICANT: SIA, Charles D.Y.
; APPLICANT: CHONG, Pele
; APPLICANT: KLEIN, Michel H.
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides
; NUMBER OF SEQUENCES: 101
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: Suite 701, 330 University Avenue
; CITY: Toronto
```



```
; STATE: Ontario
; COUNTRY: Canada
; ZIP: MSG 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/467,881A
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/257,528
; FILING DATE: 09-JUN-1994
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/073,378
; FILING DATE: 09-JUN-1993
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, MICHAEL I.
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-488 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-467-881A-16

Query Match      74.0%; Score 57; DB 2; Length 21;
Best Local Similarity 91.7%; Pred. No. 0.016;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 RIQGGGGRAFT 12
Db      7 RIQGGGRAFT 18

RESULT 233
US-08-704-170-71
; Sequence 71, Application US/08704170
; Patent No. 5707626
; GENERAL INFORMATION:
; APPLICANT: Douvas, Angeline
; APPLICANT: Takehana, Yoshi
; APPLICANT: Ehresmann, Glenn
; TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR
; NUMBER OF SEQUENCES: 121
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Robbins, Berliner & Carson
; STREET: 201 No. 570726th Figueroa Street, Suite 500
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90012
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/704,170
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/029,850
; FILING DATE: 11-MAR-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Spitals, John P.
; REGISTRATION NUMBER: 29,215
; REFERENCE/DOCKET NUMBER: 1920-331
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 977-1001
; TELEFAX: (213) 977-1003
; INFORMATION FOR SEQ ID NO: 71:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; PCT-US94-02631-71

Query Match      68.8%; Score 53; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.033;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
; FILING DATE: 11-MAR-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Spitals, John P.
; REGISTRATION NUMBER: 29,215
; REFERENCE/DOCKET NUMBER: 1920-331
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 977-1001
; TELEFAX: (213) 977-1003
; INFORMATION FOR SEQ ID NO: 71:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-704-170-71

Query Match      68.8%; Score 53; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.033;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      5 GPGRAFTVIG 14
Db      1 GPGRAFTVIG 10

RESULT 234
PCT-US94-02631-71
; Sequence 71, Application PC/TUS9402631
; GENERAL INFORMATION:
; APPLICANT: Douvas, Angeline
; APPLICANT: Takehana, Yoshi
; APPLICANT: Ehresmann, Glenn
; TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR
; NUMBER OF SEQUENCES: 121
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Robbins, Berliner & Carson
; STREET: 201 North Figueroa Street, Suite 500
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90012
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/02631
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/029,850
; FILING DATE: 11-MAR-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Spitals, John P.
; REGISTRATION NUMBER: 29,215
; REFERENCE/DOCKET NUMBER: 1920-331
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 977-1001
; TELEFAX: (213) 977-1003
; INFORMATION FOR SEQ ID NO: 71:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; PCT-US94-02631-71

Query Match      68.8%; Score 53; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.033;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy 5 GPGRAFTVIG 14  
Db 1 GPGRAFTVIG 10

RESULT 235  
US-08-257-528B-36  
; Sequence 36, Application US/08257528B  
; Patent No. 5639854  
; GENERAL INFORMATION:  
; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; APPLICANT: KLEIN, Michel H.  
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
; NUMBER OF SEQUENCES: 101  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: Suite 701, 330 University Avenue  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: M5G 1R7  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/257,528B  
; FILING DATE: 09-JUN-1994  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: STEWART, MICHAEL I.  
; REGISTRATION NUMBER: 24,973  
; REFERENCE/DOCKET NUMBER: 1038-336 MIS:jb  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 595-1155  
; TELEFAX: (416) 595-1163  
; INFORMATION FOR SEQ ID NO: 36:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 14 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-257-528B-36

Query Match 68.8%; Score 53; DB 1; Length 14;  
Best Local Similarity 100.0%; Pred.No. 0.046;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQRPGRGF 10  
Db 5 RIQRPGRGF 14

RESULT 236  
US-08-460-602A-36  
; Sequence 36, Application US/08460602A  
; Patent No. 5759769  
; GENERAL INFORMATION:  
; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; APPLICANT: KLEIN, Michel H.  
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
; NUMBER OF SEQUENCES: 101  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: Suite 701, 330 University Avenue  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: M5G 1R7  
; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/460,602A  
; FILING DATE: 02-JUN-1995  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/257,528  
; FILING DATE: 09-JUN-1994  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/073,378  
; FILING DATE: 09-JUN-1993  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: STEWART, MICHAEL I.  
; REGISTRATION NUMBER: 24,973  
; REFERENCE/DOCKET NUMBER: 1038-450 MIS:jb  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 595-1155  
; TELEFAX: (416) 595-1163  
; INFORMATION FOR SEQ ID NO: 36:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 14 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-460-602A-36

Query Match 68.8%; Score 53; DB 1; Length 14;  
Best Local Similarity 100.0%; Pred.No. 0.046;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQRPGRGF 10  
Db 5 RIQRPGRGF 14

RESULT 237  
US-08-463-966A-36  
; Sequence 36, Application US/08463966A  
; Patent No. 5795955  
; GENERAL INFORMATION:  
; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; APPLICANT: KLEIN, Michel H.  
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
; NUMBER OF SEQUENCES: 101  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: Suite 701, 330 University Avenue  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: M5G 1R7  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/463,966A  
; FILING DATE: 05-JUN-1995  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/257,528  
; FILING DATE: 09-JUN-1994  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/073,378  
; FILING DATE: 09-JUN-1993

CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-487 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 36:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-463-966A-36

Query Match 68.8%; Score 53; DB 1; Length 14;  
Best Local Similarity 100.0%; Pred. No. 0.046;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRF 10  
DB 5 RIQGPGRF 14

RESULT 238  
US-08-465-217A-36  
Sequence 36, Application US/08465217A  
Patent No. 5800822  
GENERAL INFORMATION:  
APPLICANT: SIA, Charles D.Y.  
APPLICANT: CHONG, Pele  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/465,217A  
FILING DATE: 05-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/257,528  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/073,378  
FILING DATE: 09-JUN-1993  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-486 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 36:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-465-217A-36

Query Match 68.8%; Score 53; DB 1; Length 14;  
Best Local Similarity 100.0%; Pred. No. 0.046;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRF 10  
DB 5 RIQGPGRF 14

RESULT 239  
US-08-464-329A-36  
Sequence 36, Application US/08464329A  
Patent No. 5817754  
GENERAL INFORMATION:  
APPLICANT: SIA, Charles D.Y.  
APPLICANT: CHONG, Pele  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/464,329A  
FILING DATE: 05-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/257,528  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/073,378  
FILING DATE: 09-JUN-1993  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-449 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 36:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-464-329A-36

Query Match 68.8%; Score 53; DB 2; Length 14;  
Best Local Similarity 100.0%; Pred. No. 0.046;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRF 10  
DB 5 RIQGPGRF 14

RESULT 240  
US-08-462-507A-36  
Sequence 36, Application US/08462507A  
Patent No. 5876731  
GENERAL INFORMATION:

APPLICANT: SIA, Charles D.Y.  
APPLICANT: CHONG, Pele  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/462,507A  
FILING DATE: 05-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/073,378  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/257,528  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-451 MIS:jb  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
LENGTH: 14 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-462-507A-36

Query Match 68.8%; Score 53; DB 2; Length 14;  
Best Local Similarity 100.0%; Pred. No. 0.046;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RIQRGPGRAF 10  
DB 5 RIQRGPGRAF 14

RESULT 241  
US-08-467-881A-36  
Sequence 36, Application US/08467881A  
Patent No. 5951986  
GENERAL INFORMATION:  
APPLICANT: SIA, Charles D.Y.  
APPLICANT: CHONG, Pele  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/467,881A  
FILING DATE: 06-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/257,528  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/073,378  
FILING DATE: 09-JUN-1993  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-488 MIS:jb  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 36:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-467-881A-36

Query Match 68.8%; Score 53; DB 2; Length 14;  
Best Local Similarity 100.0%; Pred. No. 0.046;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RIQRGPGRAF 10  
DB 5 RIQRGPGRAF 14

RESULT 242  
US-08-218-025A-16  
Sequence 16, Application US/08218025A  
Patent No. 5556744  
GENERAL INFORMATION:  
APPLICANT: Weiner, David B.  
APPLICANT: Ugen, Kenneth E.  
APPLICANT: Williams, William V.  
TITLE OF INVENTION: Methods and Compositions for Diagnosing  
TITLE OF INVENTION: and Treating Certain HIV Infected Patients  
NUMBER OF SEQUENCES: 197  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Howson and Howson  
STREET: P.O. Box 457, 321 No. 5556744ristown Road  
CITY: Spring House  
STATE: Pennsylvania  
COUNTRY: U.S.A.  
ZIP: 19477  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/218,025A  
FILING DATE: 24-MAR-1994  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/891,451  
FILING DATE: 29-MAY-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Bak, Mary E.  
REGISTRATION NUMBER: 31,215  
REFERENCE/DOCKET NUMBER: WST33A  
TELECOMMUNICATION INFORMATION:

```
;
; TELEPHONE: (215) 540-9206
; TELEFAX: (215) 540-5818
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: unknown
; MOLECULE TYPE: peptide
US-08-218-025A-16

Query Match 68.8%; Score 53; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.049;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFI 10
Db 6 RIQPGGRAFI 15

RESULT 243
PCT-US92-01303-12
; Sequence 12, Application PC/TUS9201303
; GENERAL INFORMATION:
; APPLICANT: Murray, Michael G. et al.
; TITLE OF INVENTION: POLIOVIRUS-BASED VACCINES
; NUMBER OF SEQUENCES: 17
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: U.S.A.
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; COMPUTER: IBM PS/2 Model 50Z or 55SX
; OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
; SOFTWARE: WordPerfect (Version 5.0)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US92/01303
; FILING DATE: 19920214
; CLASSIFICATION: 564
; PRIOR APPLICATION NUMBER:
; APPLICATION NUMBER: 07/655,669
; FILING DATE: 14-FEB-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: PAUL T. CLARK
; REGISTRATION NUMBER: 30,162
; REFERENCE/DOCKET NUMBER: 00231/050W01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 542-5070
; TELEFAX: (617) 542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20
; TYPE: AMINO ACID
; TOPOLOGY: linear
PCT-US92-01303-12

Query Match 68.8%; Score 53; DB 5; Length 20;
Best Local Similarity 83.3%; Pred. No. 0.064;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 IORPGGRAFTI 13
Db 9 IORPGGRAFTI 20

RESULT 244
US-09-820-484-8
; Sequence 8, Application US/09820484
; Patent No. 6534062
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```
;
; GENERAL INFORMATION:
; APPLICANT: Raz, Eyal
; APPLICANT: Cho, Hearn Jay
; APPLICANT: Richman, Douglas
; APPLICANT: Horner, Anthony A.
; TITLE OF INVENTION: Method for Increasing a Cytotoxic T
; TITLE OF INVENTION: Lymphocyte Response in vivo.
; FILE REFERENCE: 06510-188US1
; CURRENT APPLICATION NUMBER: US/09/820,484
; CURRENT FILING DATE: 2001-03-28
; PRIOR APPLICATION NUMBER: US 60/192,537
; PRIOR FILING DATE: 2000-03-28
; PRIOR APPLICATION NUMBER: US 60/203,567
; PRIOR FILING DATE: 2000-05-11
; PRIOR APPLICATION NUMBER: US 60/215,895
; PRIOR FILING DATE: 2000-07-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: HIV-1 class I-restricted gp120 peptide
US-09-820-484-8

Query Match 67.5%; Score 52; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.047;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRGFVTI 13
Db 1 RGPGRGFVTI 10

RESULT 245
US-09-430-470-24
; Sequence 24, Application US/09430470
; Patent No. 6562800
; GENERAL INFORMATION:
; APPLICANT: McMillan, Minnie
; TITLE OF INVENTION: THE USE OF IMMUNOPOTENTIATING SEQUENCES
; TITLE OF INVENTION: FOR INDUCING IMMUNE RESPONSE
; FILE REFERENCE: 13761-725
; CURRENT APPLICATION NUMBER: US/09/430,470
; CURRENT FILING DATE: 1999-10-29
; EARLIER APPLICATION NUMBER: US 60/106,506
; EARLIER FILING DATE: 1998-10-30
; NUMBER OF SEQ ID NOS: 25
; SEQ ID NO 24
; SOFTWARE: FastSeq for Windows Version 4.0
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human immunodeficiency virus (HIV)
; FEATURE:
; OTHER INFORMATION: Residues 318-327 of gp120 (GenBank accession
; OTHER INFORMATION: number gi224364)
US-09-430-470-24

Query Match 67.5%; Score 52; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.047;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRGFVTI 13
Db 1 RGPGRGFVTI 10

RESULT 246
US-08-937-276A-5
; Sequence 5, Application US/08937276A
; Patent No. 6592872
; GENERAL INFORMATION:
```

APPLICANT: Klimpel, Kurt  
Goletz, Theresa J.  
Aroza, Naveen  
Leppla, Stephen H.  
Berzofsky, Jay A.  
TITLE OF INVENTION: Targeting Antigens to the MHC Class I  
Processing Pathway With an Anthrax Toxin Fusion Protein  
NUMBER OF SEQUENCES: 5  
CORRESPONDENCE ADDRESS:  
ADDRESS: Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/937,276A  
FILING DATE: 15-Sep-1997  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/025,270  
FILING DATE: 17-SEP-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Weber, Kenneth A.  
REGISTRATION NUMBER: 31,677  
REFERENCE/DOCKET NUMBER: 015280-290100US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 5:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 10 amino acids  
TYPE: amino acid  
STRANDEDNESS: <Unknown>  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
SEQUENCE DESCRIPTION: SEQ ID NO: 5:  
US-08-937-276A-5

Query Match 67.5%; Score 52; DB 4; Length 10;  
Best Local Similarity 100.0%; Pred. No. 0.047;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTTI 13  
| | | | |  
DB 1 RGPGRFVTTI 10

RESULT 247  
US-09-454-204A-51  
; Sequence 51, Application US/09454204A  
; Patent No. 6663871  
; GENERAL INFORMATION:  
; APPLICANT: McMichael, Andrew  
; APPLICANT: Hill, Adrian V.S.  
; APPLICANT: Gilbert, Sarah C.  
; APPLICANT: Schneider, Jorg  
; APPLICANT: Plebanski, Magdalena  
; APPLICANT: Hanke, Tomas  
; APPLICANT: Smith, Geoffrey L.  
; APPLICANT: Blanchard, Tom  
; TITLE OF INVENTION: Methods and Reagents for Vaccination  
; FILE REFERENCE: 2907.1000-000  
; CURRENT APPLICATION NUMBER: US/09/454,204A  
; PRIOR FILING DATE: 1999-12-09  
; PRIOR APPLICATION NUMBER: PCT/GB98/01681  
; PRIOR FILING DATE: 1998-06-09

; PRIOR APPLICATION NUMBER: GB 97 11957.2  
; PRIOR FILING DATE: 1997-06-09  
; NUMBER OF SEQ ID NOS: 78  
; SOFTWARE: FastSEQ for Windows Version 4.0  
; SEQ ID NO 51  
; LENGTH: 10  
; TYPE: PRT  
; ORGANISM: Unknown  
; FEATURE:  
; OTHER INFORMATION: CTL Epitope of HIV-1 gp120  
US-09-454-204A-51

Query Match 67.5%; Score 52; DB 4; Length 10;  
Best Local Similarity 100.0%; Pred. No. 0.047;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTTI 13  
| | | | |  
DB 1 RGPGRFVTTI 10

RESULT 248  
US-09-454-204A-68  
; Sequence 68, Application US/09454204A  
; Patent No. 6663871  
; GENERAL INFORMATION:  
; APPLICANT: McMichael, Andrew  
; APPLICANT: Hill, Adrian V.S.  
; APPLICANT: Gilbert, Sarah C.  
; APPLICANT: Schneider, Jorg  
; APPLICANT: Plebanski, Magdalena  
; APPLICANT: Hanke, Tomas  
; APPLICANT: Smith, Geoffrey L.  
; APPLICANT: Blanchard, Tom  
; TITLE OF INVENTION: Methods and Reagents for Vaccination  
; FILE REFERENCE: 2907.1000-000  
; CURRENT APPLICATION NUMBER: US/09/454,204A  
; PRIOR FILING DATE: 1999-12-09  
; PRIOR APPLICATION NUMBER: PCT/GB98/01681  
; PRIOR FILING DATE: 1998-06-09  
; PRIOR APPLICATION NUMBER: GB 97 11957.2  
; NUMBER OF SEQ ID NOS: 78  
; SOFTWARE: FastSEQ for Windows Version 4.0  
; SEQ ID NO 68  
; LENGTH: 10  
; TYPE: PRT  
; ORGANISM: Unknown  
; FEATURE:  
; OTHER INFORMATION: CTL Peptide Epitope of HIV gag  
US-09-454-204A-68

Query Match 67.5%; Score 52; DB 4; Length 10;  
Best Local Similarity 100.0%; Pred. No. 0.047;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTTI 13  
| | | | |  
DB 1 RGPGRFVTTI 10

RESULT 249  
US-09-508-552-16  
; Sequence 16, Application US/09508552  
; Patent No. 6749856  
; GENERAL INFORMATION:  
; APPLICANT: Berzofsky, Jay A.  
; APPLICANT: Belyakov, Igor M.  
; APPLICANT: Derby, Michael A.  
; APPLICANT: Kelsall, Brian L.  
; APPLICANT: Strober, Warren  
; APPLICANT: THE GOVERNMENT OF THE UNITED STATES OF AMERICA, as

Search completed: May 16, 2005, 14:41:20  
Job time : 45 secs

;; TITLE OF INVENTION: MUCOSAL CYTOTOXIC T LYMPHOCYTE RESPONSES  
;; FILE REFERENCE: 368200PCSEQ  
;; CURRENT APPLICATION NUMBER: US/05/508,552  
;; CURRENT FILING DATE: 2000-06-12  
;; PRIOR APPLICATION NUMBER: 60/058,523  
;; PRIOR FILING DATE: 1997-09-11  
;; PRIOR APPLICATION NUMBER: 60/074,894  
;; PRIOR FILING DATE: 1998-02-17  
;; NUMBER OF SEQ ID NOS: 20  
;; SOFTWARE: PatentIn Ver. 2.0  
;; SEQ ID NO 16  
;; LENGTH: 10  
;; TYPE: PRT  
;; ORGANISM: Human immunodeficiency virus type 1  
US-09-508-552-16

Query Match 67.5%; Score 52; DB 4; Length 10;  
Best Local Similarity 100.0%; Pred. No. 0.047; Mismatches 0; Indels 0; Gaps 0;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy' 4 RGPGRFVTTI 13  
| | | | | | | | | |  
Db 1 RGPGRFVTTI 10

RESULT 250  
PCT-US92-01303-1  
; Sequence 1, Application PC/TUS9201303  
; GENERAL INFORMATION:  
; APPLICANT: Murray, Michael G. et al.  
; TITLE OF INVENTION: POLIOVIRUS-BASED VACCINES  
; NUMBER OF SEQUENCES: 17  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Fish & Richardson  
; STREET: 225 Franklin Street  
; CITY: Boston  
; STATE: Massachusetts  
; COUNTRY: U.S.A.  
; ZIP: 02110-2804  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
; COMPUTER: IBM PS/2 Model 50Z or 55SX  
; OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)  
; SOFTWARE: WordPerfect (Version 5.0)  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US92/01303  
; FILING DATE: 19920214  
; CLASSIFICATION: 564  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 07/655,669  
; FILING DATE: 14-FEB-1991  
; ATTORNEY/AGENT INFORMATION:  
; NAME: PAUL T. CLARK  
; REGISTRATION NUMBER: 30,162  
; REFERENCE/DOCKET NUMBER: 00231/050W01  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (617) 542-5070  
; TELEFAX: (617) 542-8906  
; TELEX: 200154  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 10  
; TYPE: AMINO ACID  
; TOPOLOGY: linear  
PCT-US92-01303-1

Query Match 67.5%; Score 52; DB 5; Length 10;  
Best Local Similarity 100.0%; Pred. No. 0.047; Mismatches 0; Indels 0; Gaps 0;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 2 IORGGRFV 11  
| | | | | | | | | |  
Db 1 IORGGRFV 10

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**This Page Blank (uspto)**



GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: May 16, 2005, 12:57:08 ; Search time 70.7692 Seconds  
(without alignments)  
70.804 Million cell updates/sec

Title: US-08-869-386-1

Perfect score: 77  
Sequence: 1 RIQPGGPAFTVIGK 15

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1432185 seqs, 334051727 residues

Total number of hits satisfying chosen parameters: 325800

Minimum DB seq length: 0  
Maximum DB seq length: 25

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Published Applications AA:  
1: /cgn2\_6/ptodata/1/pubpaa/US07\_PUBCOMB.pep.\*  
2: /cgn2\_6/ptodata/1/pubpaa/PCT\_NEW\_PUB.pep.\*  
3: /cgn2\_6/ptodata/1/pubpaa/US06\_NEW\_PUB.pep.\*  
4: /cgn2\_6/ptodata/1/pubpaa/US06\_PUBCOMB.pep.\*  
5: /cgn2\_6/ptodata/1/pubpaa/US07\_NEW\_PUB.pep.\*  
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9: /cgn2\_6/ptodata/1/pubpaa/US09B\_PUBCOMB.pep.\*  
10: /cgn2\_6/ptodata/1/pubpaa/US09C\_PUBCOMB.pep.\*  
11: /cgn2\_6/ptodata/1/pubpaa/US09\_NEW\_PUB.pep.\*  
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14: /cgn2\_6/ptodata/1/pubpaa/US10C\_PUBCOMB.pep.\*  
15: /cgn2\_6/ptodata/1/pubpaa/US10D\_PUBCOMB.pep.\*  
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20: /cgn2\_6/ptodata/1/pubpaa/US60\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Match | Length | ID | Description       |
|------------|-------|-------|--------|----|-------------------|
| 1          | 77    | 100.0 | 15     | 9  | US-09-810-310-15  |
| 2          | 77    | 100.0 | 15     | 9  | US-09-810-310-24  |
| 3          | 77    | 100.0 | 15     | 9  | US-09-989-621-8   |
| 4          | 77    | 100.0 | 15     | 10 | US-09-827-688-9   |
| 5          | 77    | 100.0 | 15     | 10 | US-09-077-439A-3  |
| 6          | 77    | 100.0 | 15     | 14 | US-10-133-210-246 |
| 7          | 77    | 100.0 | 15     | 14 | US-10-133-210-262 |
| 8          | 77    | 100.0 | 15     | 14 | US-10-147-910-6   |
| 9          | 77    | 100.0 | 15     | 17 | US-10-787-880-2   |
| 10         | 77    | 100.0 | 16     | 14 | US-10-062-710-44  |
| 11         | 77    | 100.0 | 20     | 9  | US-09-813-659-3   |
| 12         | 77    | 100.0 | 20     | 15 | US-10-283-610A-3  |
| 13         | 77    | 100.0 | 21     | 14 | US-10-178-488-25  |

|    |    |       |    |    |                    |                    |
|----|----|-------|----|----|--------------------|--------------------|
| 14 | 77 | 100.0 | 24 | 17 | US-10-821-675-160  | Sequence 160, Appl |
| 15 | 73 | 94.8  | 20 | 14 | US-10-311-111-1    | Sequence 1, Appl1  |
| 16 | 73 | 94.8  | 20 | 16 | US-10-398-932-1    | Sequence 1, Appl1  |
| 17 | 72 | 93.5  | 18 | 14 | US-10-062-710-45   | Sequence 45, Appl  |
| 18 | 68 | 88.3  | 13 | 14 | US-10-239-313A-536 | Sequence 536, Appl |
| 19 | 68 | 88.3  | 15 | 14 | US-10-239-313A-186 | Sequence 186, Appl |
| 20 | 66 | 85.7  | 15 | 10 | US-09-993-307-21   | Sequence 21, Appl  |
| 21 | 63 | 81.8  | 12 | 14 | US-10-239-313A-535 | Sequence 535, Appl |
| 22 | 62 | 80.5  | 20 | 10 | US-09-827-345-24   | Sequence 24, Appl  |
| 23 | 58 | 75.3  | 13 | 14 | US-10-311-111-3    | Sequence 3, Appl1  |
| 24 | 58 | 75.3  | 13 | 16 | US-10-398-932-3    | Sequence 3, Appl1  |
| 25 | 58 | 75.3  | 15 | 9  | US-09-901-106-10   | Sequence 10, Appl1 |
| 26 | 57 | 74.0  | 11 | 14 | US-10-239-313A-533 | Sequence 533, Appl |
| 27 | 57 | 74.0  | 15 | 17 | US-10-622-003-6    | Sequence 6, Appl1  |
| 28 | 57 | 74.0  | 17 | 9  | US-09-901-106-12   | Sequence 12, Appl  |
| 29 | 52 | 67.5  | 10 | 9  | US-09-858-349-3    | Sequence 3, Appl1  |
| 30 | 52 | 67.5  | 10 | 9  | US-09-810-310-16   | Sequence 16, Appl  |
| 31 | 52 | 67.5  | 10 | 9  | US-09-820-484-8    | Sequence 8, Appl1  |
| 32 | 52 | 67.5  | 10 | 9  | US-09-087-513-7    | Sequence 7, Appl1  |
| 33 | 52 | 67.5  | 10 | 9  | US-09-087-513-13   | Sequence 13, Appl1 |
| 34 | 52 | 67.5  | 10 | 10 | US-09-997-848A-16  | Sequence 16, Appl  |
| 35 | 52 | 67.5  | 10 | 10 | US-09-993-307-22   | Sequence 22, Appl  |
| 36 | 52 | 67.5  | 10 | 14 | US-10-113-085-7    | Sequence 7, Appl1  |
| 37 | 52 | 67.5  | 10 | 14 | US-10-168-843A-2   | Sequence 2, Appl1  |
| 38 | 52 | 67.5  | 10 | 14 | US-10-147-910-12   | Sequence 12, Appl  |
| 39 | 52 | 67.5  | 10 | 14 | US-10-079-167-51   | Sequence 51, Appl  |
| 40 | 52 | 67.5  | 10 | 14 | US-10-079-167-68   | Sequence 68, Appl  |
| 41 | 52 | 67.5  | 10 | 14 | US-10-340-275-8    | Sequence 8, Appl1  |
| 42 | 52 | 67.5  | 10 | 14 | US-10-339-885-8    | Sequence 8, Appl1  |
| 43 | 52 | 67.5  | 10 | 14 | US-10-206-155-5    | Sequence 5, Appl1  |
| 44 | 52 | 67.5  | 10 | 14 | US-10-210-148-113  | Sequence 113, Appl |
| 45 | 52 | 67.5  | 10 | 14 | US-10-360-836-48   | Sequence 48, Appl  |

ALIGNMENTS

RESULT 1  
US-09-810-310-15  
; Sequence 15, Application US/09810310  
; Patent No. US2002004948A1  
; GENERAL INFORMATION:  
; APPLICANT: Khleif, Samir N.  
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR CO-STIMULATION OF  
; IMMUNOLOGICAL RESPONSES TO PEPTIDE ANTIGENS  
; FILE REFERENCE: 15280-415100US  
; CURRENT APPLICATION NUMBER: US/09/810,310  
; CURRENT FILING DATE: 2001-03-14  
; PRIOR APPLICATION NUMBER: 60/189,396  
; FILING DATE: 2000-03-15  
; NUMBER OF SEQ ID NOS: 61  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 15  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: HIV PEPTIDE  
; OTHER INFORMATION: ANTIGEN  
; US-09-810-310-15

Query Match 100.0%; Score 77; DB 9; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.9e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 1 RIQPGGPAFTVIGK 15  
| | | | |  
Db 1 RIQPGGPAFTVIGK 15

RESULT 2  
US-09-810-310-24

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; Sequence 24, Application US/09810310
; Patent No. US20020044948A1
; GENERAL INFORMATION:
; APPLICANT: ORSON, FRANK
; APPLICANT: KINSEY, BERMA
; APPLICANT: BHOGAL, BALBIR
; TITLE OF INVENTION: MACROAGGREGATED PROTEIN CONJUGATES AS ORAL GENETIC IMMUNIZATION DI
; TITLE OF INVENTION: AGENTS
; FILE REFERENCE: P01949US1/10004014
; CURRENT APPLICATION NUMBER: US/09/827,688
; CURRENT FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: 60/195,680
; PRIOR FILING DATE: 2000-04-07
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 9
; LENGTH: 15
; TYPE: PRT
; ORGANISM: HIV pl8
; US-09-827-688-9

Query Match      100.0%; Score 77; DB 10; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.9e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 RIQRGPGRAFTVIGK 15
Db      1 RIQRGPGRAFTVIGK 15

RESULT 5
US-09-077-439A-3
; Sequence 3, Application US/09077439A
; Publication No. US20030202989A1
; GENERAL INFORMATION:
; APPLICANT: Collier, R. John
; APPLICANT: Blanke, Steven R.
; APPLICANT: Milne, Jill C.
; APPLICANT: Benson, Ericka L.
; APPLICANT: Ballard, Jimmy D.
; APPLICANT: Starnbach, Michael N.
; TITLE OF INVENTION: Use of Toxin Peptides and/or Affinity
; TITLE OF INVENTION: Handles for Delivering Compounds into Cells
; FILE REFERENCE: 00246/187002
; CURRENT APPLICATION NUMBER: US/09/077,439A
; CURRENT FILING DATE: 1999-04-08
; PRIOR APPLICATION NUMBER: PCT/US96/20463
; PRIOR FILING DATE: 1996-12-13
; PRIOR APPLICATION NUMBER: US 60/019,275
; PRIOR FILING DATE: 1996-06-07
; PRIOR APPLICATION NUMBER: US 60/008,518
; PRIOR FILING DATE: 1995-12-13
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Homo sapien
; US-09-077-439A-3

Query Match      100.0%; Score 77; DB 10; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.9e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 RIQRGPGRAFTVIGK 15
Db      1 RIQRGPGRAFTVIGK 15

RESULT 6
US-10-133-210-246
; Sequence 246, Application US/10133210
; Publication No. US20030103964A1
; GENERAL INFORMATION:
; APPLICANT: DeLisi, Charles
```

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; Sequence 24, Application US/09810310
; Patent No. US20020044948A1
; GENERAL INFORMATION:
; APPLICANT: Khleif, Samir N.
; APPLICANT: Bezofsky, Jay A.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR CO-STIMULATION OF
; TITLE OF INVENTION: IMMUNOLOGICAL RESPONSES TO PEPTIDE ANTIGENS
; FILE REFERENCE: 15280-415100US
; CURRENT APPLICATION NUMBER: US/09/810,310
; CURRENT FILING DATE: 2001-03-14
; PRIOR APPLICATION NUMBER: 60/189,396
; PRIOR FILING DATE: 2000-03-15
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 24
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: HIV PEPTIDE
; OTHER INFORMATION: ANTIGEN
; US-09-810-310-24

Query Match      100.0%; Score 77; DB 9; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.9e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 RIQRGPGRAFTVIGK 15
Db      1 RIQRGPGRAFTVIGK 15

RESULT 3
US-09-989-621-8
; Sequence 8, Application US/09989621
; Patent No. US20020151683A1
; GENERAL INFORMATION:
; APPLICANT: Mogam Biotechnology Research Institute
; APPLICANT: Kim, Tae-Young
; APPLICANT: Lee, Ki-Young
; APPLICANT: Chang, Jin-Soo
; APPLICANT: Cho, Sung-Yoo
; APPLICANT: Hwang, Yu-Kyeong
; APPLICANT: Choi, Myeong
; APPLICANT: Cheong, Hong-Seok
; TITLE OF INVENTION: Liposomes Comprising Peptide Antigens
; TITLE OF INVENTION: Derived from X Protein of Hepatitis B virus
; FILE REFERENCE: 0136/08154
; CURRENT APPLICATION NUMBER: US/09/989,621
; CURRENT FILING DATE: 2001-11-20
; PRIOR APPLICATION NUMBER: 09/051,006
; PRIOR FILING DATE: 2000-11-17
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 15
; TYPE: PRT
; ORGANISM: HIV
; US-09-989-621-8

Query Match      100.0%; Score 77; DB 9; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.9e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 RIQRGPGRAFTVIGK 15
Db      1 RIQRGPGRAFTVIGK 15

RESULT 4
US-09-827-688-9
; Sequence 9, Application US/09827688
; Publication No. US20030165476A1
```

; APPLICANT: Berzofsky, Jay  
; APPLICANT: Gulukota, Kamalakar  
; APPLICANT: Vaccaro, Dennis  
; APPLICANT: Weng, Zhiping  
; APPLICANT: Zhang, Chao  
; TITLE OF INVENTION: METHODS FOR DESIGNING MOLECULAR CONJUGATES AND  
; TITLE OF INVENTION: COMPOSITIONS THEREOF  
; FILE REFERENCE: BU-035AX  
; CURRENT APPLICATION NUMBER: US/10/133,210  
; CURRENT FILING DATE: 2002-04-26  
; NUMBER OF SEQ ID NOS: 281  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 246  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
US-10-133-210-246

Query Match 100.0%; Score 77; DB 14; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.9e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGPGRFVTVIGK 15  
Db 1 RIQGPGRFVTVIGK 15  
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RESULT 7  
US-10-133-210-262  
; Sequence 262, Application US/10133210  
; Publication No. US20030103964A1  
; GENERAL INFORMATION:  
; APPLICANT: DeLisi, Charles  
; APPLICANT: Berzofsky, Jay  
; APPLICANT: Gulukota, Kamalakar  
; APPLICANT: Vaccaro, Dennis  
; APPLICANT: Weng, Zhiping  
; APPLICANT: Zhang, Chao  
; TITLE OF INVENTION: METHODS FOR DESIGNING MOLECULAR CONJUGATES AND  
; TITLE OF INVENTION: COMPOSITIONS THEREOF  
; FILE REFERENCE: BU-035AX  
; CURRENT APPLICATION NUMBER: US/10/133,210  
; CURRENT FILING DATE: 2002-04-26  
; NUMBER OF SEQ ID NOS: 281  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 262  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
US-10-133-210-262

Query Match 100.0%; Score 77; DB 14; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.9e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGPGRFVTVIGK 15  
Db 1 RIQGPGRFVTVIGK 15  
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RESULT 8  
US-10-147-910-6  
; Sequence 6, Application US/10147910  
; Publication No. US20030124718A1  
; GENERAL INFORMATION:  
; APPLICANT: Fuller, Deborah  
; APPLICANT: Fuller, James  
; APPLICANT: Haynes, Joel  
; APPLICANT: Shipley, Timothy

; TITLE OF INVENTION: Vaccine Composition  
; FILE REFERENCE: 033267-006  
; CURRENT APPLICATION NUMBER: US/10/147,910  
; CURRENT FILING DATE: 2002-05-20  
; PRIOR APPLICATION NUMBER: US 60/291,654  
; PRIOR FILING DATE: 2001-05-18  
; PRIOR APPLICATION NUMBER: US 60/291,655  
; PRIOR FILING DATE: 2001-05-18  
; NUMBER OF SEQ ID NOS: 53  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 6  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: HIV  
US-10-147-910-6

Query Match 100.0%; Score 77; DB 14; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.9e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGPGRFVTVIGK 15  
Db 1 RIQGPGRFVTVIGK 15  
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RESULT 9  
US-10-787-880-2  
; Sequence 2, Application US/10787880  
; Publication No. US2005002577A1  
; GENERAL INFORMATION:  
; APPLICANT: Pohlmann, Edward L.  
; APPLICANT: Sheehy, Michael J.  
; APPLICANT: Barton, Kenneth A.  
; TITLE OF INVENTION: PARTICLE-MEDIATED DELIVERY OF ANTIGENS  
; FILE REFERENCE: 033267-018  
; CURRENT APPLICATION NUMBER: US/10/787,880  
; CURRENT FILING DATE: 2004-02-27  
; PRIOR APPLICATION NUMBER: US/09/191,772  
; PRIOR FILING DATE: 1998-11-13  
; NUMBER OF SEQ ID NOS: 2  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 2  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: HIVgp120  
US-10-787-880-2

Query Match 100.0%; Score 77; DB 17; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.9e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGPGRFVTVIGK 15  
Db 1 RIQGPGRFVTVIGK 15  
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RESULT 10  
US-10-062-710-44  
; Sequence 44, Application US/10062710  
; Publication No. US20030049253A1  
; GENERAL INFORMATION:  
; APPLICANT: Li, Frank Q.  
; APPLICANT: Chu, Yong-Liang  
; APPLICANT: Qiu, Jian-Tai  
; TITLE OF INVENTION: Polymeric Conjugates for Delivery of  
; TITLE OF INVENTION: MHC-Recognized Epitopes  
; TITLE OF INVENTION: Via Peptide Vaccines  
; FILE REFERENCE: 3781-001-27  
; CURRENT APPLICATION NUMBER: US/10/062,710  
; CURRENT FILING DATE: 2002-02-05  
; PRIOR APPLICATION NUMBER: US 60/310,498  
; PRIOR FILING DATE: 2001-08-08  
; NUMBER OF SEQ ID NOS: 232

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; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 44
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: HIV Helper-T Cell Epitopes
US-10-062-710-44

Query Match      100.0%; Score 77; DB 14; Length 16;
Best Local Similarity 100.0%; Pred. No. 2e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15
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DB 2 RIQRGPGRAFTVIGK 16

RESULT 11
US-09-813-659-3
; Sequence 3, Application US/09813659
; Patent No. US20020012989A1
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden, Martha S.
; APPLICANT: Linsley, Peter S.
; APPLICANT: Bajorath, Jurgen
; APPLICANT: Fell, H. Perry
; APPLICANT: Gilliland, Lisa K.
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING BISPECIFIC FUSION PROTEINS
; TITLE OF INVENTION: AND METHODS OF PRODUCING BIOLOGICALLY ACTIVE BISPECIFIC
; FILE REFERENCE: 30436.18USD2
; CURRENT APPLICATION NUMBER: US/09/813,659
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 09/549,067
; PRIOR FILING DATE: 2000-04-13
; PRIOR APPLICATION NUMBER: 08/539,436
; PRIOR FILING DATE: 1995-10-05
; PRIOR APPLICATION NUMBER: 08/121,054
; PRIOR FILING DATE: 1993-09-13
; PRIOR APPLICATION NUMBER: 08/013,420
; PRIOR FILING DATE: 1993-02-01
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-813-659-3

Query Match      100.0%; Score 77; DB 9; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.5e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15
   |||||
DB 5 RIQRGPGRAFTVIGK 19

RESULT 12
US-10-283-610A-3
; Sequence 3, Application US/10283610A
; Publication No. US20030219876A1
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden, Martha S.
; APPLICANT: Linsley, Peter S.
; APPLICANT: Bajorath, Jurgen
; APPLICANT: Fell, H. Perry
; APPLICANT: Gilliland, Lisa K.
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING BISPECIFIC FUSION PROTEINS
; TITLE OF INVENTION: AND METHODS OF PRODUCING BIOLOGICALLY ACTIVE BISPECIFIC
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; TITLE OF INVENTION: FUSION PROTEINS IN A MAMMALIAN CELL
; FILE REFERENCE: ON107E/30436.18USD3
; CURRENT APPLICATION NUMBER: US/10/283,610A
; CURRENT FILING DATE: 2002-10-29
; PRIOR APPLICATION NUMBER: 09/549,067
; PRIOR FILING DATE: 2000-04-13
; PRIOR APPLICATION NUMBER: 08/539,436
; PRIOR FILING DATE: 1995-10-05
; PRIOR APPLICATION NUMBER: 08/121,054
; PRIOR FILING DATE: 1993-09-13
; PRIOR APPLICATION NUMBER: 08/013,420
; PRIOR FILING DATE: 1993-02-01
; NUMBER OF SEQ ID NOS: 35
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-283-610A-3

Query Match      100.0%; Score 77; DB 15; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.5e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15
   |||||
DB 5 RIQRGPGRAFTVIGK 19

RESULT 13
US-10-178-488-25
; Sequence 25, Application US/10178488
; Publication No. US20030165535A1
; GENERAL INFORMATION:
; APPLICANT: Rovinski, Benjamin
; APPLICANT: Cao, Shi-Xian
; APPLICANT: Yao, Fei-Long
; APPLICANT: Persson, Roy
; APPLICANT: Klein, Michel H.
; TITLE OF INVENTION: RETROVIRUS-LIKE PARTICLES MADE NON-INFECTIOUS BY A
; FILE REFERENCE: 1038-1238 MIS
; CURRENT APPLICATION NUMBER: US/10/178,488
; CURRENT FILING DATE: 2002-10-25
; PRIOR APPLICATION NUMBER: 09/258,128
; PRIOR FILING DATE: 1999-02-26
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 25
; LENGTH: 21
; TYPE: PRT
; ORGANISM: Unknown Organism
; FEATURE:
; OTHER INFORMATION: Description of Unknown Organism: Artificial
US-10-178-488-25

Query Match      100.0%; Score 77; DB 14; Length 21;
Best Local Similarity 100.0%; Pred. No. 2.6e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15
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DB 7 RIQRGPGRAFTVIGK 21

RESULT 14
US-10-621-675-160
; Sequence 160, Application US/10621675
; Publication No. US20050049398A1
; GENERAL INFORMATION:
; APPLICANT: De Leys, Robert
; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING
; TITLE OF INVENTION: TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN
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FILE REFERENCE: 024918-0103  
CURRENT APPLICATION NUMBER: US/10/398,932  
CURRENT FILING DATE: 2003-04-11  
PRIOR APPLICATION NUMBER: PCT/JP01/08893  
PRIOR FILING DATE: 2001-10-10  
PRIOR APPLICATION NUMBER: JP 2000/314288  
PRIOR FILING DATE: 2000-10-13  
NUMBER OF SEQ ID NOS: 55  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 1  
LENGTH: 20  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURES:  
OTHER INFORMATION: Description of Artificial Sequence: Synthetically Designed Peptide  
US-10-398-932-1

Query Match 94.8%; Score 73; DB 16; Length 20;  
Best Local Similarity 93.3%; Pred. No. 0.00011;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQPGGPAFTVIGK 15  
DB 5 RIQPGGPAFTVIGK 19

RESULT 17  
US-10-062-710-45  
Sequence 45, Application US/10062710  
Publication No. US20030049253A1  
GENERAL INFORMATION:  
APPLICANT: Li, Frank Q.  
APPLICANT: Chu, Yong-Liang  
APPLICANT: Qiu, Jian-Tai  
TITLE OF INVENTION: Polymeric Conjugates for Delivery of  
TITLE OF INVENTION: MHC-Recognized Epitopes  
TITLE OF INVENTION: Via Peptide Vaccines  
FILE REFERENCE: 3781-001-27  
CURRENT APPLICATION NUMBER: US/10/062,710  
CURRENT FILING DATE: 2002-02-05  
PRIOR APPLICATION NUMBER: US 60/310,498  
PRIOR FILING DATE: 2001-08-08  
NUMBER OF SEQ ID NOS: 232  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 45  
LENGTH: 18  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: HIV Helper-T Cell Epitopes  
US-10-062-710-45

Query Match 93.5%; Score 72; DB 14; Length 18;  
Best Local Similarity 100.0%; Pred. No. 0.00014;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 RIQPGGPAFTVIGK 15  
DB 2 RIQPGGPAFTVIGK 15

RESULT 18  
US-10-239-313A-536  
Sequence 536, Application US/10239313A  
Publication No. US20030175285A1  
GENERAL INFORMATION:  
APPLICANT: KLINGUER - HAMOUR, Christine  
APPLICANT: CORVAIA, Nathalie  
APPLICANT: BECK, Alain  
APPLICANT: GOETSCH, Liliane  
TITLE OF INVENTION: MOLECULE OF PHARMACEUTICAL INTEREST COMPRISING AT ITS  
TITLE OF INVENTION: N-TERMINAL A GLUTAMIC ACID OR A GLUTAMINE IN THE FORM

TITLE OF INVENTION: A PROCESS FOR DETERMINATION OF ANTIBODIES OF  
TITLE OF INVENTION: BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT  
TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS  
TITLE OF INVENTION: CONTAINING THEM  
FILE REFERENCE: 2752-11  
CURRENT APPLICATION NUMBER: US/10/621,675  
CURRENT FILING DATE: 2003-07-18  
PRIOR APPLICATION NUMBER: US/09/576,824A  
PRIOR APPLICATION NUMBER: 08/723,425  
PRIOR FILING DATE: 1996-09-30  
PRIOR APPLICATION NUMBER: 09/146,028  
PRIOR FILING DATE: 1993-11-22  
PRIOR APPLICATION NUMBER: PCT/EP93/00517  
PRIOR FILING DATE: 1993-03-08  
PRIOR APPLICATION NUMBER: EP 92400598.6  
PRIOR FILING DATE: 1992-03-06  
NUMBER OF SEQ ID NOS: 600  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 160  
LENGTH: 24  
TYPE: PRT  
ORGANISM: Human immunodeficiency virus  
US-10-621-675-160

Query Match 100.0%; Score 77; DB 17; Length 24;  
Best Local Similarity 100.0%; Pred. No. 2.9e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGPAFTVIGK 15  
DB 8 RIQPGGPAFTVIGK 22

RESULT 15  
US-10-311-111-1  
Sequence 1, Application US/10311111  
Publication No. US20030121065A1  
GENERAL INFORMATION:  
APPLICANT: SHIBA, KIYOTAKA  
TITLE OF INVENTION: MULTIFUNCTIONAL BASE SEQUENCE AND ARTIFICIAL GENE CONTAINING THE  
FILE REFERENCE: 4439-4004  
CURRENT APPLICATION NUMBER: US/10/311,111  
CURRENT FILING DATE: 2002-12-13  
PRIOR APPLICATION NUMBER: JP 2000-180997  
PRIOR FILING DATE: 2000-06-16  
NUMBER OF SEQ ID NOS: 34  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 1  
LENGTH: 20  
TYPE: PRT  
ORGANISM: artificial  
FEATURE:  
OTHER INFORMATION: Designed peptide  
US-10-311-111-1

Query Match 94.8%; Score 73; DB 14; Length 20;  
Best Local Similarity 93.3%; Pred. No. 0.00011;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQPGGPAFTVIGK 15  
DB 5 RIQPGGPAFTVIGK 19

RESULT 16  
US-10-398-932-1  
Sequence 1, Application US/10398932  
Publication No. US20040171803A1  
GENERAL INFORMATION:  
APPLICANT: SHIBA, KIYOTAKA  
APPLICANT: OHNO, TSUNOYA  
TITLE OF INVENTION: ARTIFICIAL PROTEINS WITH ENRICHED IMMUNOGEN  
TITLE OF INVENTION: OF EPITOPE

; TITLE OF INVENTION: OF A PHYSIOLOGICALLY ACCEPTABLE STRONG ACID  
; FILE REFERENCE: 343 727 - US  
; CURRENT APPLICATION NUMBER: US/10/239,313A  
; CURRENT FILING DATE: 2002-09-19  
; PRIOR APPLICATION NUMBER: FR 00/03711  
; PRIOR FILING DATE: 2000-03-23  
; PRIOR APPLICATION NUMBER: PCT 01/70772  
; PRIOR FILING DATE: 2001-03-22  
; NUMBER OF SEQ ID NOS: 697  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 536  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: Human immunodeficiency virus  
US-10-239-313A-536

Query Match 88.3%; Score 68; DB 14; Length 13;  
Best Local Similarity 100.0%; Pred. No. 0.00044; Indels 0; Gaps 0;  
Matches 13; Conservative 0; Mismatches 0;

Qy 3 ORGPGRAFTVIGK 15  
Db 1 ORGPGRAFTVIGK 13

## RESULT 19

US-10-239-313A-186  
; Sequence 186, Application US/10239313A  
; Publication No. US20030175285A1  
; GENERAL INFORMATION:  
; APPLICANT: KLINGUER - HAMOUR, Christine  
; APPLICANT: CORVAIA, Nathalie  
; APPLICANT: BECK, Alain  
; APPLICANT: GOETSCH, Liliane  
; TITLE OF INVENTION: MOLECULE OF PHARMACEUTICAL INTEREST COMPRISING AT ITS  
; TITLE OF INVENTION: N-TERMINAL A GLUTAMIC ACID OR A GLUTAMINE IN THE FORM  
; TITLE OF INVENTION: OF A PHYSIOLOGICALLY ACCEPTABLE STRONG ACID  
; FILE REFERENCE: 343 727 - US  
; CURRENT APPLICATION NUMBER: US/10/239,313A  
; CURRENT FILING DATE: 2002-09-19  
; PRIOR APPLICATION NUMBER: FR 00/03711  
; PRIOR FILING DATE: 2000-03-23  
; PRIOR APPLICATION NUMBER: PCT 01/70772  
; PRIOR FILING DATE: 2001-03-22  
; NUMBER OF SEQ ID NOS: 697  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 186  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: Human immunodeficiency virus  
US-10-239-313A-186

Query Match 89.3%; Score 68; DB 14; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.0005; Indels 0; Gaps 0;  
Matches 13; Conservative 0; Mismatches 0;

Qy 3 ORGPGRAFTVIGK 15  
Db 2 ORGPGRAFTVIGK 14

## RESULT 20

US-09-993-307-21  
; Sequence 21, Application US/09993307  
; Publication No. US20030162733A1  
; GENERAL INFORMATION:  
; APPLICANT: HAYNES, Joel R.  
; APPLICANT: ARRINGTON, Joshua  
; TITLE OF INVENTION: NUCLEIC ACID ADJUVANTS  
; FILE REFERENCE: AFP41-20  
; CURRENT APPLICATION NUMBER: US/09/993,307  
; CURRENT FILING DATE: 2001-11-26  
; PRIOR APPLICATION NUMBER: 60/253,381

; PRIOR FILING DATE: 2000-11-27  
; NUMBER OF SEQ ID NOS: 26  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 21  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: synthetic construct  
US-09-993-307-21

Query Match 85.7%; Score 66; DB 10; Length 15;  
Best Local Similarity 86.7%; Pred. No. 0.001; Indels 0; Gaps 0;  
Matches 13; Conservative 0; Mismatches 2;

Qy 1 RIORGPGRAFTVIGK 15  
Db 1 RIORGPGRAFTVIGK 15

## RESULT 21

US-10-239-313A-535  
; Sequence 535, Application US/10239313A  
; Publication No. US20030175285A1  
; GENERAL INFORMATION:  
; APPLICANT: KLINGUER - HAMOUR, Christine  
; APPLICANT: CORVAIA, Nathalie  
; APPLICANT: BECK, Alain  
; APPLICANT: GOETSCH, Liliane  
; TITLE OF INVENTION: MOLECULE OF PHARMACEUTICAL INTEREST COMPRISING AT ITS  
; TITLE OF INVENTION: N-TERMINAL A GLUTAMIC ACID OR A GLUTAMINE IN THE FORM  
; TITLE OF INVENTION: OF A PHYSIOLOGICALLY ACCEPTABLE STRONG ACID  
; FILE REFERENCE: 343 727 - US  
; CURRENT APPLICATION NUMBER: US/10/239,313A  
; CURRENT FILING DATE: 2002-09-19  
; PRIOR APPLICATION NUMBER: FR 00/03711  
; PRIOR FILING DATE: 2000-03-23  
; PRIOR APPLICATION NUMBER: PCT 01/70772  
; PRIOR FILING DATE: 2001-03-22  
; NUMBER OF SEQ ID NOS: 697  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 535  
; LENGTH: 12  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-239-313A-535

Query Match 81.8%; Score 63; DB 14; Length 12;  
Best Local Similarity 100.0%; Pred. No. 0.0025; Indels 0; Gaps 0;  
Matches 12; Conservative 0; Mismatches 0;

Qy 3 ORGPGRAFTVIGK 14  
Db 1 ORGPGRAFTVIGK 12

## RESULT 22

US-09-827-345-24  
; Sequence 24, Application US/09827345  
; Publication No. US20030021800A1  
; GENERAL INFORMATION:  
; APPLICANT: CHERMANN, JEAN-CLAUDE  
; APPLICANT: LE CONTEL, CAROLE  
; APPLICANT: GALEA, PASCALE  
; TITLE OF INVENTION: VACCINE AGAINST INFECTIOUS AGENTS HAVING AN  
; TITLE OF INVENTION: INTRACELLULAR PHASE, COMPOSITION FOR THE TREATMENT AND  
; TITLE OF INVENTION: PREVENTION OF HIV INFECTIONS, ANTIBODIES AND METHOD OF  
; TITLE OF INVENTION: DIAGNOSIS  
; FILE REFERENCE: 065691-0216  
; CURRENT APPLICATION NUMBER: US/09/827,345  
; CURRENT FILING DATE: 2001-04-09  
; PRIOR APPLICATION NUMBER: 09/599,549  
; PRIOR FILING DATE: 2000-06-23  
; PRIOR APPLICATION NUMBER: PCT/FR96/01006  
; PRIOR FILING DATE: 1996-06-28

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; PRIOR APPLICATION NUMBER: 08/973,551
; PRIOR FILING DATE: 1998-02-19
; PRIOR APPLICATION NUMBER: FR 95/07914
; PRIOR FILING DATE: 1995-06-30
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 24
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: peptide
US-09-827-345-24

Query Match      80.5%; Score 62; DB 10; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.006;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGGRFVT 12
Db 9 RIQPGGGRFVT 20

RESULT 23
US-10-311-111-3
; Sequence 3, Application US/10311111
; Publication No. US20030121065A1
; GENERAL INFORMATION:
; APPLICANT: SHIBA, KIYOTAKA
; TITLE OF INVENTION: MULTIFUNCTIONAL BASE SEQUENCE AND ARTIFICIAL GENE CONTAINING THE
; FILE REFERENCE: 4439-4004
; CURRENT APPLICATION NUMBER: US/10/311,111
; CURRENT FILING DATE: 2002-12-13
; PRIOR APPLICATION NUMBER: JP 2000-180997
; PRIOR FILING DATE: 2000-06-16
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 13
; TYPE: PRT
; ORGANISM: artificial
; FEATURE:
; OTHER INFORMATION: Designed peptide
US-10-311-111-3

Query Match      75.3%; Score 58; DB 14; Length 13;
Best Local Similarity 91.7%; Pred. No. 0.017;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQPGGGRFVT 12
Db 2 RIQPGGGRFVT 13

RESULT 24
US-10-398-932-3
; Sequence 3, Application US/10398932
; Publication No. US20040171803A1
; GENERAL INFORMATION:
; APPLICANT: SHIBA, KIYOTAKA
; APPLICANT: OHNO, TSUNEYA
; TITLE OF INVENTION: ARTIFICIAL PROTEINS WITH ENRICHED IMMUNOGEN
; FILE REFERENCE: 024918-0103
; CURRENT APPLICATION NUMBER: US/10/398,932
; CURRENT FILING DATE: 2003-04-11
; PRIOR APPLICATION NUMBER: PCT/JP01/08893
; PRIOR FILING DATE: 2001-10-10
; PRIOR APPLICATION NUMBER: JP 2000/314288
; PRIOR FILING DATE: 2000-10-13
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 3
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetically Designed
; OTHER INFORMATION: Peptide
US-10-398-932-3

Query Match      75.3%; Score 58; DB 16; Length 13;
Best Local Similarity 91.7%; Pred. No. 0.017;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQPGGGRFVT 12
Db 2 RIQPGGGRFVT 13

RESULT 25
US-09-901-106-10
; Sequence 10, Application US/09901106
; Patent No. US20020151067A1
; GENERAL INFORMATION:
; APPLICANT: Garoff, Henrik
; TITLE OF INVENTION: DNA Expression Systems Based on
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolaesch & Birch
; STREET: P.O. Box 747
; CITY: Falls Church
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22040-0747
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/901,106
; FILING DATE: 10-Jul-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/07/920,281C
; FILING DATE: 13-AUG-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Murphy Jr., Gerald M.
; REGISTRATION NUMBER: 28,977
; REFERENCE/DOCKET NUMBER: 828-103P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-241-1300
; TELEFAX: 703-241-2848
; TELEX: 248345
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 10:
US-09-901-106-10

Query Match      75.3%; Score 58; DB 9; Length 15;
Best Local Similarity 84.6%; Pred. No. 0.02;
Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQPGGGRFVTI 13
Db 3 RIQPGGGRFVEL 15
```

## RESULT 26

US-10-239-313A-533  
; Sequence 533, Application US/10239313A  
; Publication No. US20030175285A1  
; GENERAL INFORMATION:  
; APPLICANT: KLINGUER - HAMOUR, Christine  
; APPLICANT: CORVAIA, Nathalie  
; APPLICANT: BECK, Alain  
; APPLICANT: GOETSCH, Liliane  
; TITLE OF INVENTION: MOLECULE OF PHARMACEUTICAL INTEREST COMPRISING AT ITS  
; TITLE OF INVENTION: N-TERMINAL A GLUTAMIC ACID OR A GLUTAMINE IN THE FORM  
; TITLE OF INVENTION: OF A PHYSIOLOGICALLY ACCEPTABLE STRONG ACID  
; FILE REFERENCE: 343 727 - US  
; CURRENT APPLICATION NUMBER: US/10/239,313A  
; CURRENT FILING DATE: 2002-09-19  
; PRIOR APPLICATION NUMBER: FR 00/03711  
; PRIOR FILING DATE: 2000-03-23  
; PRIOR APPLICATION NUMBER: PCT 01/70772  
; PRIOR FILING DATE: 2001-03-22  
; NUMBER OF SEQ ID NOS: 697  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 533  
; LENGTH: 11  
; TYPE: PRT  
; ORGANISM: Mus musculus  
US-10-239-313A-533

Query Match 74.0%; Score 57; DB 14; Length 11;  
Best Local Similarity 100.0%; Pred. No. 0.021; Mismatches 0; Indels 0; Gaps 0;  
Matches 11; Conservative 0

Qy 3 RQPGGRAFTV 13  
Db 1 RQPGGRAFTV 11

## RESULT 27

US-10-622-003-6  
; Sequence 6, Application US/10622003  
; Publication No. US20050014230A1  
; GENERAL INFORMATION:  
; APPLICANT: Chin, Li-Te  
; TITLE OF INVENTION: PREPARATION OF FULLY HUMAN ANTIBODIES  
; FILE REFERENCE: 16863-002001  
; CURRENT APPLICATION NUMBER: US/10/622,003  
; CURRENT FILING DATE: 2003-07-16  
; NUMBER OF SEQ ID NOS: 20  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 6  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetically generated peptide  
US-10-622-003-6

Query Match 74.0%; Score 57; DB 17; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.029; Mismatches 0; Indels 0; Gaps 0;  
Matches 11; Conservative 0

Qy 1 RIQPGGRAFV 11  
Db 5 RIQPGGRAFV 15

## RESULT 28

US-09-901-106-12  
; Sequence 12, Application US/09901106  
; Patent No. US20020151067A1  
; GENERAL INFORMATION:  
; APPLICANT: Garoff, Henrik  
; TITLE OF INVENTION: DNA Expression Systems Based on

## Alphaviruses

NUMBER OF SEQUENCES: 27  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/901,106  
FILING DATE: 10-Jul-2001  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/07/920,281C  
FILING DATE: 13-AUG-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Murphy Jr., Gerald M.  
REGISTRATION NUMBER: 28,977  
REFERENCE/DOCKET NUMBER: 828-103P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-241-1300  
TELEFAX: 703-241-2848  
TELEX: 248345  
INFORMATION FOR SEQ ID NO: 12:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 17 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
SEQUENCE DESCRIPTION: SEQ ID NO: 12:  
US-09-901-106-12

Query Match 74.0%; Score 57; DB 9; Length 17;  
Best Local Similarity 100.0%; Pred. No. 0.032; Mismatches 0; Indels 0; Gaps 0;  
Matches 11; Conservative 0

Qy 1 RIQPGGRAFV 11  
Db 4 RIQPGGRAFV 14

## RESULT 29

US-09-858-349-3  
; Sequence 3, Application US/09858349  
; Patent No. US20020012909A1  
; GENERAL INFORMATION:  
; APPLICANT: PLAKSIN, Daniel  
; TITLE OF INVENTION: SMALL FUNCTIONAL UNITS OF ANTIBODY HEAVY CHAIN VARIABLE REGIONS  
; FILE REFERENCE: 87534-2800  
; CURRENT APPLICATION NUMBER: US/09/858,349  
; CURRENT FILING DATE: 2000-06-02  
; NUMBER OF SEQ ID NOS: 16  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 3  
; LENGTH: 10  
; TYPE: PRT  
; ORGANISM: mouse hybridoma specific for H-2D + RQPGGRAFTV peptide  
US-09-858-349-3

Query Match 67.5%; Score 52; DB 9; Length 10;  
Best Local Similarity 100.0%; Pred. No. 0.12; Mismatches 0; Indels 0; Gaps 0;  
Matches 10; Conservative 0

Qy 4 RQPGGRAFTV 13  
Db 1 RQPGGRAFTV 10



RESULT 30  
US-09-810-310-16  
; Sequence 16, Application US/09810310  
; Patent No. US20020044948A1  
; GENERAL INFORMATION:  
; APPLICANT: Khleif, Samir N.  
; APPLICANT: Bezofsky, Jay A.  
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR CO-STIMULATION OF  
; TITLE OF INVENTION: IMMUNOLOGICAL RESPONSES TO PEPTIDE ANTIGENS  
; FILE REFERENCE: 15280-415100US  
; CURRENT APPLICATION NUMBER: US/09/810,310  
; CURRENT FILING DATE: 2001-03-14  
; PRIOR APPLICATION NUMBER: 60/189,396  
; PRIOR FILING DATE: 2000-03-15  
; NUMBER OF SEQ ID NOS: 61  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 16  
; LENGTH: 10  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: HIV PEPTIDE  
; OTHER INFORMATION: ANTIGEN  
US-09-810-310-16

Query Match 67.5%; Score 52; DB 9; Length 10;  
Best Local Similarity 100.0%; Pred. No. 0.12;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4 RGPGRFVTI 13  
| | | | | | | |  
Db 1 RGPGRFVTI 10

RESULT 31  
US-09-820-484-8  
; Sequence 8, Application US/09820484  
; Patent No. US20020142977A1  
; GENERAL INFORMATION:  
; APPLICANT: Raz, Eyal  
; APPLICANT: Cho, Hearn Jay  
; APPLICANT: Richman, Douglas  
; APPLICANT: Horner, Anthony A.  
; TITLE OF INVENTION: Method for Increasing a Cytotoxic T  
; TITLE OF INVENTION: Lymphocyte Response in vivo.  
; FILE REFERENCE: 06510-188U1  
; CURRENT APPLICATION NUMBER: US/09/820,484  
; CURRENT FILING DATE: 2001-03-28  
; PRIOR APPLICATION NUMBER: US 60/192,537  
; PRIOR FILING DATE: 2000-03-28  
; PRIOR APPLICATION NUMBER: US 60/203,567  
; PRIOR FILING DATE: 2000-05-11  
; PRIOR APPLICATION NUMBER: US 60/215,895  
; PRIOR FILING DATE: 2000-07-05  
; NUMBER OF SEQ ID NOS: 8  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 8  
; LENGTH: 10  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: HIV-1 class I-restricted gp120 peptide  
US-09-820-484-8

Query Match 67.5%; Score 52; DB 9; Length 10;  
Best Local Similarity 100.0%; Pred. No. 0.12;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4 RGPGRFVTI 13  
| | | | | | | |  
Db 1 RGPGRFVTI 10

RESULT 32  
US-09-087-513-7  
; Sequence 7, Application US/09087513  
; Publication No. US20020182180A1  
; GENERAL INFORMATION:  
; APPLICANT: KANEKO, Yutaro  
; APPLICANT: KOZBOR, Danuta  
; TITLE OF INVENTION: METHOD OF INDUCING IMMUNITY TO VIRUSES  
; FILE REFERENCE: 0010-0929-0X  
; CURRENT APPLICATION NUMBER: US/09/087,513  
; CURRENT FILING DATE: 1998-05-29  
; NUMBER OF SEQ ID NOS: 23  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 7  
; LENGTH: 10  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence:peptide  
US-09-087-513-7

Query Match 67.5%; Score 52; DB 9; Length 10;  
Best Local Similarity 100.0%; Pred. No. 0.12;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4 RGPGRFVTI 13  
| | | | | | | |  
Db 1 RGPGRFVTI 10

RESULT 33  
US-09-087-513-13  
; Sequence 13, Application US/09087513  
; Publication No. US20020182180A1  
; GENERAL INFORMATION:  
; APPLICANT: KANEKO, Yutaro  
; APPLICANT: KOZBOR, Danuta  
; TITLE OF INVENTION: METHOD OF INDUCING IMMUNITY TO VIRUSES  
; FILE REFERENCE: 0010-0929-0X  
; CURRENT APPLICATION NUMBER: US/09/087,513  
; CURRENT FILING DATE: 1998-05-29  
; NUMBER OF SEQ ID NOS: 23  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 13  
; LENGTH: 10  
; TYPE: PRT  
; ORGANISM: Human immunodeficiency virus  
US-09-087-513-13

Query Match 67.5%; Score 52; DB 9; Length 10;  
Best Local Similarity 100.0%; Pred. No. 0.12;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4 RGPGRFVTI 13  
| | | | | | | |  
Db 1 RGPGRFVTI 10

RESULT 34  
US-09-997-848A-16  
; Sequence 16, Application US/09997848A  
; Publication No. US20030027322A1  
; GENERAL INFORMATION:  
; APPLICANT: Federoff, Howard J.  
; APPLICANT: Bowers, William J.  
; APPLICANT: Freilinger, John G.  
; APPLICANT: Willis, Richard A.  
; APPLICANT: Evans, Thomas J.  
; APPLICANT: Dewhurst, Stephen  
; APPLICANT: Tolba, Khaled A.  
; APPLICANT: Rosenblatt, Joseph D.  
; TITLE OF INVENTION: HELPER VIRUS-FREE HERPESVIRUS AMPLICON  
US-09-997-848A-16

```
; TITLE OF INVENTION: PARTICLES AND USES THEREOF
; FILE REFERENCE: 12610-011001
; CURRENT APPLICATION NUMBER: US/09/997,848A
; CURRENT FILING DATE: 2002-09-10
; PRIOR APPLICATION NUMBER: US 60/253,858
; PRIOR FILING DATE: 2000-11-29
; PRIOR APPLICATION NUMBER: US 60/250,079
; PRIOR FILING DATE: 2000-11-30
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human immunodeficiency virus
US-09-997-848A-16

Query Match      67.5%; Score 52; DB 10; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTI 13
   |||||
Db 1 RGPGRFVTI 10

RESULT 35
US-09-993-307-22
; Sequence 22, Application US/09993307
; Publication No. US2003016273A1
; GENERAL INFORMATION:
; APPLICANT: HAYNES, Joel R.
; TITLE OF INVENTION: NUCLEIC ACID ADJUVANTS
; FILE REFERENCE: APF41.20
; CURRENT APPLICATION NUMBER: US/09/993,307
; CURRENT FILING DATE: 2001-11-26
; PRIOR APPLICATION NUMBER: 60/253,381
; PRIOR FILING DATE: 2000-11-27
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 22
; LENGTH: 10
; TYPE: PRT
; ORGANISM: synthetic construct
US-09-993-307-22

Query Match      67.5%; Score 52; DB 10; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTI 13
   |||||
Db 1 RGPGRFVTI 10

RESULT 36
US-10-113-085-7
; Sequence 7, Application US/10113085
; Publication No. US20030003086A1
; GENERAL INFORMATION:
; APPLICANT: Rock, Kenneth L.
; APPLICANT: Goldberg, Alfred L.
; TITLE OF INVENTION: MODULATION OF MHC CLASS 1 ANTIGEN PRESENTATION
; FILE REFERENCE: 07917-140001
; CURRENT APPLICATION NUMBER: US/10/113,085
; CURRENT FILING DATE: 2002-09-04
; PRIOR APPLICATION NUMBER: US 60/280,669
; PRIOR FILING DATE: 2001-03-30
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 10
; TYPE: PRT

; ORGANISM: Homo sapiens
US-10-113-085-7

Query Match      67.5%; Score 52; DB 14; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTI 13
   |||||
Db 1 RGPGRFVTI 10

RESULT 37
US-10-168-843A-2
; Sequence 2, Application US/10168843A
; Publication No. US20030108562A1
; GENERAL INFORMATION:
; APPLICANT: Medical Research Council
; APPLICANT: International Aids Vaccine Initiative
; APPLICANT: University of Nairobi
; TITLE OF INVENTION: Improvements in or Relating to Immune Responses to HIV
; FILE REFERENCE: MJL/C1248/1/M
; CURRENT APPLICATION NUMBER: US/10/168,843A
; CURRENT FILING DATE: 2002-09-24
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human immunodeficiency virus
US-10-168-843A-2

Query Match      67.5%; Score 52; DB 14; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTI 13
   |||||
Db 1 RGPGRFVTI 10

RESULT 38
US-10-147-910-12
; Sequence 12, Application US/10147910
; Publication No. US20030124718A1
; GENERAL INFORMATION:
; APPLICANT: Fuller, Deborah
; APPLICANT: Fuller, James
; APPLICANT: Haynes, Joel
; APPLICANT: Shipley, Timothy
; TITLE OF INVENTION: Vaccine Composition
; FILE REFERENCE: 033267-006
; CURRENT APPLICATION NUMBER: US/10/147,910
; CURRENT FILING DATE: 2002-05-20
; PRIOR APPLICATION NUMBER: US 60/291,654
; PRIOR FILING DATE: 2001-05-18
; PRIOR APPLICATION NUMBER: US 60/291,655
; PRIOR FILING DATE: 2001-05-18
; NUMBER OF SEQ ID NOS: 53
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 10
; TYPE: PRT
; ORGANISM: HIV
US-10-147-910-12

Query Match      67.5%; Score 52; DB 14; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTI 13
   |||||
Db 1 RGPGRFVTI 10
```

```

; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: CTL Peptide Epitope of HIV gag
US-10-079-167-68

Query Match      67.5%; Score 52; DB 14; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.12; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0;

QY      4 RGPGRFVTI 13
      |||||
Db      1 RGPGRFVTI 10

RESULT 41
US-10-340-275-8
; Sequence 8, Application US/10340275
; Publication No. US20030143213A1
; GENERAL INFORMATION:
; APPLICANT: Raz, Eyal
; APPLICANT: Cho, Hearn Jay
; APPLICANT: Richman, Douglas
; APPLICANT: Horner, Anthony A.
; TITLE OF INVENTION: Method for Increasing a Cytotoxic T
; FILE OF INVENTION: Lymphocyte Response in vivo.
; FILE REFERENCE: UCAL-188DIV
; CURRENT APPLICATION NUMBER: US/10/340,275
; CURRENT FILING DATE: 2003-01-10
; PRIOR APPLICATION NUMBER: 09/820,484
; PRIOR FILING DATE: 2001-03-28
; PRIOR APPLICATION NUMBER: US 60/192,537
; PRIOR FILING DATE: 2000-03-28
; PRIOR APPLICATION NUMBER: US 60/203,567
; PRIOR FILING DATE: 2000-05-11
; PRIOR APPLICATION NUMBER: US 60/215,895
; PRIOR FILING DATE: 2000-07-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: HIV-1 class I-restricted gp120 peptide
US-10-340-275-8

Query Match      67.5%; Score 52; DB 14; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.12; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0;

QY      4 RGPGRFVTI 13
      |||||
Db      1 RGPGRFVTI 10

RESULT 42
US-10-339-885-8
; Sequence 8, Application US/10339885
; Publication No. US20030147870A1
; GENERAL INFORMATION:
; APPLICANT: Raz, Eyal
; APPLICANT: Cho, Hearn Jay
; APPLICANT: Richman, Douglas
; APPLICANT: Horner, Anthony A.
; TITLE OF INVENTION: Method for Increasing a Cytotoxic T
; FILE OF INVENTION: Lymphocyte Response in vivo.
; FILE REFERENCE: UCAL-188CON
; CURRENT APPLICATION NUMBER: US/10/339,885
; CURRENT FILING DATE: 2003-01-10
; PRIOR APPLICATION NUMBER: 09/820,484
; PRIOR FILING DATE: 2001-03-28
; PRIOR APPLICATION NUMBER: US 60/192,537
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: CTL Epitope of HIV-1 gp120
US-10-079-167-51

Query Match      67.5%; Score 52; DB 14; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.12; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0;

QY      4 RGPGRFVTI 13
      |||||
Db      1 RGPGRFVTI 10

RESULT 40
US-10-079-167-68
; Sequence 8, Application US/10079167
; Publication No. US20030138454A1
; GENERAL INFORMATION:
; APPLICANT: Hill, Adrian V.S.
; APPLICANT: McShane, Helen
; APPLICANT: Gilbert, Sarah C.
; APPLICANT: Reece, William
; APPLICANT: Schneider, Joerg
; TITLE OF INVENTION: Vaccination Method
; FILE REFERENCE: 2907.1000-001
; CURRENT APPLICATION NUMBER: US/10/079,167
; CURRENT FILING DATE: 2002-02-19
; PRIOR APPLICATION NUMBER: US 09/454,204
; PRIOR FILING DATE: 1999-12-09
; PRIOR APPLICATION NUMBER: PCT/GB98/01681
; PRIOR FILING DATE: 1998-06-09
; PRIOR APPLICATION NUMBER: GB 97 11957.2
; PRIOR FILING DATE: 1997-06-09
; PRIOR APPLICATION NUMBER: PCT/GB01/04116
; PRIOR FILING DATE: 2001-09-13
; PRIOR APPLICATION NUMBER: GB 00 23203.3
; PRIOR FILING DATE: 2001-09-21
; NUMBER OF SEQ ID NOS: 99
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 51
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: CTL Epitope of HIV-1 gp120
US-10-079-167-51

Query Match      67.5%; Score 52; DB 14; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.12; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0;

QY      4 RGPGRFVTI 13
      |||||
Db      1 RGPGRFVTI 10

RESULT 40
US-10-079-167-68
; Sequence 8, Application US/10079167
; Publication No. US20030138454A1
; GENERAL INFORMATION:
; APPLICANT: Hill, Adrian V.S.
; APPLICANT: McShane, Helen
; APPLICANT: Gilbert, Sarah C.
; APPLICANT: Reece, William
; APPLICANT: Schneider, Joerg
; TITLE OF INVENTION: Vaccination Method
; FILE REFERENCE: 2907.1000-001
; CURRENT APPLICATION NUMBER: US/10/079,167
; CURRENT FILING DATE: 2002-02-19
; PRIOR APPLICATION NUMBER: US 09/454,204
; PRIOR FILING DATE: 1999-12-09
; PRIOR APPLICATION NUMBER: PCT/GB98/01681
; PRIOR FILING DATE: 1998-06-09
; PRIOR APPLICATION NUMBER: GB 97 11957.2
; PRIOR FILING DATE: 1997-06-09
; PRIOR APPLICATION NUMBER: PCT/GB01/04116
; PRIOR FILING DATE: 2001-09-13
; PRIOR APPLICATION NUMBER: GB 00 23203.3
; PRIOR FILING DATE: 2001-09-21
; NUMBER OF SEQ ID NOS: 99
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 68
; LENGTH: 10
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; PRIOR FILING DATE: 2000-03-28
; PRIOR APPLICATION NUMBER: US 60/203,567
; PRIOR FILING DATE: 2000-05-11
; PRIOR APPLICATION NUMBER: US 60/215,895
; PRIOR FILING DATE: 2000-07-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: HIV-1 class I-restricted gp120 peptide
US-10-339-885-8

Query Match      67.5%; Score 52; DB 14; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTTI 13
Db 1 RGPGRFVTTI 10

RESULT 43
US-10-206-155-5
; Sequence 5, Application US/10206155
; Publication No. US20030157135A1
; GENERAL INFORMATION:
; APPLICANT: Tsuji, Moriya
; APPLICANT: Gonzalez-Aceguinolaza, Gloria
; APPLICANT: Nussenzweig, Ruth S.
; APPLICANT: Kozuka, Yasuhiko
; TITLE OF INVENTION: USE OF GLYCOSYLKERAMIDES AS ADJUVANTS
; TITLE OF INVENTION: FOR VACCINES AGAINST INFECTIONS AND CANCER
; FILE REFERENCE: 5986/1H958US1
; CURRENT APPLICATION NUMBER: US/10/206,155
; CURRENT FILING DATE: 2002-07-25
; PRIOR APPLICATION NUMBER: 60/308,056
; PRIOR FILING DATE: 2001-07-25
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 5
; LENGTH: 10
; TYPE: PRT
; ORGANISM: HIV-1
US-10-206-155-5

Query Match      67.5%; Score 52; DB 14; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTTI 13
Db 1 RGPGRFVTTI 10

RESULT 44
US-10-210-148-113
; Sequence 113, Application US/10210148
; Publication No. US20030171280A1
; GENERAL INFORMATION:
; APPLICANT: Soderstrom, Karl Petter
; TITLE OF INVENTION: Compositions And Methods For Modulation Of Immune Response
; FILE REFERENCE: TROM0002
; CURRENT APPLICATION NUMBER: US/10/210,148
; CURRENT FILING DATE: 2002-07-31
; PRIOR APPLICATION NUMBER: PCT/US02/24311
; PRIOR FILING DATE: 2002-07-31
; NUMBER OF SEQ ID NOS: 117
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 113
; LENGTH: 10
```

```
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-210-148-113

Query Match      67.5%; Score 52; DB 14; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTTI 13
Db 1 RGPGRFVTTI 10

RESULT 45
US-10-360-836-48
; Sequence 48, Application US/10360836
; Publication No. US20030185854A1
; GENERAL INFORMATION:
; APPLICANT: Zavala, Fidel
; APPLICANT: Birkett, Ashley
; TITLE OF INVENTION: USE OF RECOMBINANT HEPATITIS B CORE
; TITLE OF INVENTION: PARTICLES TO DEVELOP VACCINES AGAINST INFECTIOUS PATHOGENS
; TITLE OF INVENTION: AND MALIGNANCIES
; FILE REFERENCE: 5986/LJ876
; CURRENT APPLICATION NUMBER: US/10/360,836
; CURRENT FILING DATE: 2003-02-07
; PRIOR APPLICATION NUMBER: 60/354,963
; PRIOR FILING DATE: 2002-02-08
; NUMBER OF SEQ ID NOS: 86
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 48
; LENGTH: 10
; TYPE: PRT
; ORGANISM: human immunodeficiency virus (HIV-1)
US-10-360-836-48

Query Match      67.5%; Score 52; DB 14; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTTI 13
Db 1 RGPGRFVTTI 10

Search completed: May 16, 2005, 13:10:22
Job time : 72.7692 secs
```

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: May 16, 2005, 14:37:35 ; Search time 165 Seconds  
(without alignments)  
35.160 Million cell updates/sec

Title: US-08-869-386-1

Perfect score: 77

Sequence: 1 RIQGPGRFAFTIGK 15

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 768190

Minimum DB seq length: 0

Maximum DB seq length: 25

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 250 summaries

Database : A\_Geneseq\_16Dec04:\*

1: Geneseqp1980s:\*

2: Geneseqp1990s:\*

3: Geneseqp2000s:\*

4: Geneseqp2001s:\*

5: Geneseqp2002s:\*

6: Geneseqp2003as:\*

7: Geneseqp2003bs:\*

8: Geneseqp2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description          |
|------------|-------|-------------|--------|-------|----------------------|
| 1          | 77    | 100.0       | 15     | 1     | AAP82095 Env-K1 pe   |
| 2          | 77    | 100.0       | 15     | 1     | AAP91228 Peptide c   |
| 3          | 77    | 100.0       | 15     | 2     | AAR21343 HIV-1 gp1   |
| 4          | 77    | 100.0       | 15     | 2     | AAR38187 V3 loop p   |
| 5          | 77    | 100.0       | 15     | 2     | AAR32207 Sequence    |
| 6          | 77    | 100.0       | 15     | 2     | AAR51619 V3 loop r   |
| 7          | 77    | 100.0       | 15     | 2     | AAR74603 HIV-1 var   |
| 8          | 77    | 100.0       | 15     | 2     | AAR66414 HIV-1 III   |
| 9          | 77    | 100.0       | 15     | 2     | AAR68789 Cytotoxic   |
| 10         | 77    | 100.0       | 15     | 2     | AAR05535 HIV-1 gp1   |
| 11         | 77    | 100.0       | 15     | 2     | AAR92033 Hydrophil   |
| 12         | 77    | 100.0       | 15     | 2     | AAR07931 gp120 pep   |
| 13         | 77    | 100.0       | 15     | 2     | AAR92007 HIV-1 V3    |
| 14         | 77    | 100.0       | 15     | 2     | AAR24219 CD4+ T-ly   |
| 15         | 77    | 100.0       | 15     | 2     | AAR10348 HIV epitope |
| 16         | 77    | 100.0       | 15     | 2     | AAR22031 Antigenic   |
| 17         | 77    | 100.0       | 15     | 2     | AAR39275 HIV-1 syn   |
| 18         | 77    | 100.0       | 15     | 2     | AAR40316 HIV-1 III   |
| 19         | 77    | 100.0       | 15     | 2     | AAR76898 Fusion im   |
| 20         | 77    | 100.0       | 15     | 2     | AAR54929 HIV gp120   |
| 21         | 77    | 100.0       | 15     | 2     | AAR06896 Sequence    |
| 22         | 77    | 100.0       | 15     | 2     | AAY24466 HIV pepti   |
| 23         | 77    | 100.0       | 15     | 2     | AAY25189 HIV prote   |
| 24         | 77    | 100.0       | 15     | 2     | AAY25204 HIV V3 pe   |
| 25         | 77    | 100.0       | 15     | 2     | AAY05356 HIV-1 CLU   |

|    |    |       |    |   |                      |
|----|----|-------|----|---|----------------------|
| 26 | 77 | 100.0 | 15 | 2 | AAW72821 HIV-1 gp1   |
| 27 | 77 | 100.0 | 15 | 2 | AAW87620 Epitope o   |
| 28 | 77 | 100.0 | 15 | 2 | AAY04680 HIV-1 gp1   |
| 29 | 77 | 100.0 | 15 | 3 | AAY83916 HIV-1 env   |
| 30 | 77 | 100.0 | 15 | 3 | AAY66439 HLA-A2-bi   |
| 31 | 77 | 100.0 | 15 | 3 | AAY66455 HLA-A3-bi   |
| 32 | 77 | 100.0 | 15 | 3 | AAY85591 HIV relat   |
| 33 | 77 | 100.0 | 15 | 3 | AAH15875 Human che   |
| 34 | 77 | 100.0 | 15 | 4 | AAH92345 Virus rel   |
| 35 | 77 | 100.0 | 15 | 4 | AAH92348 HIV gp120   |
| 36 | 77 | 100.0 | 15 | 4 | AAH68601 HIV gp120   |
| 37 | 77 | 100.0 | 15 | 5 | AAH15743 Human imm   |
| 38 | 77 | 100.0 | 15 | 5 | AAU96031 HIV epitope |
| 39 | 77 | 100.0 | 15 | 5 | AAU97690 HIV CTL e   |
| 40 | 77 | 100.0 | 15 | 5 | ABG68654 HIV-1 P18   |
| 41 | 77 | 100.0 | 15 | 5 | ABG68663 HIV-1 P18   |
| 42 | 77 | 100.0 | 15 | 6 | AAE35161 HIV CTL e   |
| 43 | 77 | 100.0 | 15 | 7 | ADN14074 HIV helpe   |
| 44 | 77 | 100.0 | 15 | 8 | ADR04041 Immune re   |
| 45 | 77 | 100.0 | 16 | 2 | AAH24939 HIV pepti   |
| 46 | 77 | 100.0 | 16 | 2 | AAW68326 MHC bindi   |
| 47 | 77 | 100.0 | 16 | 3 | AAH68203 Altered M   |
| 48 | 77 | 100.0 | 16 | 3 | AAH52857 Altered M   |
| 49 | 77 | 100.0 | 16 | 4 | AAH58618 Altered M   |
| 50 | 77 | 100.0 | 17 | 2 | AAH42057 Peptide C   |
| 51 | 77 | 100.0 | 17 | 2 | AAH40414 Lipopepti   |
| 52 | 77 | 100.0 | 18 | 2 | AAH31277 HIV princ   |
| 53 | 77 | 100.0 | 18 | 2 | AAH30032 HIV princ   |
| 54 | 77 | 100.0 | 18 | 2 | AAH26713 HIV-PND-p   |
| 55 | 77 | 100.0 | 18 | 2 | AAH44190 gp120 V3    |
| 56 | 77 | 100.0 | 18 | 2 | AAH58548 HIV-1 iso   |
| 57 | 77 | 100.0 | 18 | 4 | ABH83113 Lipopepti   |
| 58 | 77 | 100.0 | 20 | 2 | AAH60203 HIV gp110   |
| 59 | 77 | 100.0 | 20 | 2 | AAH54930 HIV gp120   |
| 60 | 77 | 100.0 | 20 | 8 | ADR18886 HIV-1 V3-   |
| 61 | 77 | 100.0 | 21 | 2 | AAH93073 Antigenic   |
| 62 | 77 | 100.0 | 21 | 2 | AAH34475 Acceptor    |
| 63 | 77 | 100.0 | 21 | 2 | AAH75478 HIV-1 bcr   |
| 64 | 77 | 100.0 | 21 | 2 | AAH16052 HIV-1 iso   |
| 65 | 77 | 100.0 | 21 | 2 | AAH85568 Human imm   |
| 66 | 77 | 100.0 | 21 | 3 | AAH15012 Peptide p   |
| 67 | 77 | 100.0 | 21 | 4 | AAU08699 Retroviru   |
| 68 | 77 | 100.0 | 22 | 2 | AAH42153 gp120 V3    |
| 69 | 77 | 100.0 | 22 | 2 | AAH57470 HIV BRU V   |
| 70 | 77 | 100.0 | 22 | 2 | AAH07392 HIV-1 bcr   |
| 71 | 77 | 100.0 | 22 | 2 | AAH07488 HIV-1 str   |
| 72 | 77 | 100.0 | 22 | 3 | AAH85137 HIV-1 III   |
| 73 | 77 | 100.0 | 22 | 6 | ABU07537 Human N-a   |
| 74 | 77 | 100.0 | 23 | 2 | AAH04502 Cpd. elic   |
| 75 | 77 | 100.0 | 23 | 4 | AAH66704 HIV-1 III   |
| 76 | 77 | 100.0 | 24 | 2 | AAH06211 Immunosu    |
| 77 | 77 | 100.0 | 24 | 2 | AAH07018 Residues    |
| 78 | 77 | 100.0 | 24 | 2 | AAH26565 Sequence    |
| 79 | 77 | 100.0 | 24 | 2 | AAH29233 Heterocon   |
| 80 | 77 | 100.0 | 24 | 2 | AAH26870 HIV gp120   |
| 81 | 77 | 100.0 | 24 | 2 | AAH32406 Sequence    |
| 82 | 77 | 100.0 | 24 | 2 | AAH33190 Sequence    |
| 83 | 77 | 100.0 | 24 | 2 | AAH38165 V3 loop p   |
| 84 | 77 | 100.0 | 24 | 2 | AAH44191 gp120 V3    |
| 85 | 77 | 100.0 | 24 | 2 | AAH63821 HIV-1 gp1   |
| 86 | 77 | 100.0 | 24 | 2 | AAH67414 HIV-1 pep   |
| 87 | 77 | 100.0 | 24 | 2 | AAH98904 HIV-1 vac   |
| 88 | 77 | 100.0 | 24 | 2 | AAH22581 HIV LDL b   |
| 89 | 77 | 100.0 | 24 | 2 | AAH22583 HIV LDL b   |
| 90 | 77 | 100.0 | 24 | 2 | AAH39769 HIV1 chim   |
| 91 | 77 | 100.0 | 24 | 3 | AAH15873 Human che   |
| 92 | 77 | 100.0 | 24 | 4 | ABH68602 HIV gp120   |
| 93 | 77 | 100.0 | 25 | 1 | ABH68602 Peptide c   |
| 94 | 77 | 100.0 | 25 | 1 | AAH90281 Peptide i   |
| 95 | 77 | 100.0 | 25 | 2 | AAH08276 HIV pepti   |
| 96 | 77 | 100.0 | 25 | 2 | AAH13120 Binding s   |
| 97 | 77 | 100.0 | 25 | 2 | AAH15058 HIV-1 amp   |
| 98 | 77 | 100.0 | 25 | 2 | AAH31276 HIV princ   |

|     |      |       |    |   |          |                    |     |      |      |    |   |          |                    |
|-----|------|-------|----|---|----------|--------------------|-----|------|------|----|---|----------|--------------------|
| 99  | 77   | 100.0 | 25 | 2 | AAR30031 | Aar30031 HIV princ | 172 | 66   | 85.7 | 21 | 2 | AAR04060 | Aar04060 Eptope c  |
| 100 | 77   | 100.0 | 25 | 2 | AAR26712 | Aar26712 HIV-PND-p | 173 | 66   | 85.7 | 24 | 5 | AAR20149 | Aar20149 Human imm |
| 101 | 77   | 100.0 | 25 | 2 | AAR32222 | Aar32222 HIV gp120 | 174 | 66   | 85.7 | 25 | 2 | AAR63820 | Aar63820 HIV-1 gp1 |
| 102 | 77   | 100.0 | 25 | 2 | AAR41336 | Aar41336 HIV gp120 | 175 | 64   | 83.1 | 19 | 2 | AAR22329 | Aar22329 HIV-1 cli |
| 103 | 77   | 100.0 | 25 | 2 | AAR41330 | Aar41330 HIV gp120 | 176 | 64   | 83.1 | 19 | 2 | AAR62892 | Aar62892 Peptide s |
| 104 | 77   | 100.0 | 25 | 2 | AAR36587 | Aar36587 Virus neu | 177 | 63   | 81.8 | 12 | 2 | AAR62152 | Aar62152 HIV-1 gp1 |
| 105 | 77   | 100.0 | 25 | 2 | AAR72819 | Aar72819 HIV-1 gp1 | 178 | 63   | 81.8 | 12 | 2 | AAR54932 | Aar54932 HIV gp120 |
| 106 | 77   | 100.0 | 25 | 2 | AAR87618 | Aar87618 Eptope o  | 179 | 63   | 81.8 | 12 | 4 | AAR99432 | Aar99432 Vaccine r |
| 107 | 77   | 100.0 | 25 | 4 | AAR09522 | Aar09522 Human imm | 180 | 63   | 81.8 | 23 | 2 | AAR76864 | Aar76864 Fusion im |
| 108 | 75   | 97.4  | 25 | 2 | AAR04427 | Aar04427 Human imm | 181 | 63   | 81.8 | 14 | 2 | AAR04476 | Aar04476 Human imm |
| 109 | 74   | 96.1  | 15 | 2 | AAR66419 | Aar66419 HIV-1 III | 182 | 62.5 | 81.2 | 16 | 2 | AAR38249 | Aar38249 Tip of HI |
| 110 | 73   | 94.8  | 15 | 2 | AAR66430 | Aar66430 HIV-1 III | 183 | 62.5 | 81.2 | 21 | 2 | AAR27465 | Aar27465 V3 peptid |
| 111 | 73   | 94.8  | 15 | 2 | AAR66424 | Aar66424 HIV-1 III | 184 | 62.5 | 81.2 | 21 | 2 | AAR31219 | Aar31219 V3 peptid |
| 112 | 73   | 94.8  | 20 | 5 | AB05775  | AB05775 HIV gp120  | 185 | 62   | 80.5 | 12 | 2 | AAR31278 | Aar31278 HIV princ |
| 113 | 73   | 94.8  | 20 | 5 | AB015657 | AB015657 Strng im  | 186 | 62   | 80.5 | 12 | 2 | AAR26714 | Aar26714 HIV-PND-p |
| 114 | 72   | 93.5  | 14 | 2 | AAR66416 | Aar66416 HIV-1 III | 187 | 62   | 80.5 | 13 | 2 | AAR58601 | Aar58601 Alkaline  |
| 115 | 72   | 93.5  | 15 | 1 | AAP95357 | AAP95357 Variable  | 188 | 62   | 80.5 | 13 | 2 | AAR58603 | Aar58603 Alkaline  |
| 116 | 72   | 93.5  | 15 | 2 | AAR33460 | Aar33460 Sequence  | 189 | 62   | 80.5 | 13 | 2 | AAR58602 | Aar58602 Alkaline  |
| 117 | 72   | 93.5  | 15 | 2 | AAR62166 | Aar62166 HIV-1 gp1 | 190 | 62   | 80.5 | 13 | 2 | AAR58605 | Aar58605 Alkaline  |
| 118 | 72   | 93.5  | 15 | 2 | AAR66427 | Aar66427 HIV-1 III | 191 | 62   | 80.5 | 15 | 2 | AAR31254 | Aar31254 HIV princ |
| 119 | 72   | 93.5  | 15 | 2 | AAR66428 | Aar66428 HIV-1 III | 192 | 62   | 80.5 | 15 | 2 | AAR20214 | Aar20214 Cyclic HI |
| 120 | 72   | 93.5  | 15 | 2 | AAR66426 | Aar66426 HIV-1 III | 193 | 62   | 80.5 | 15 | 2 | AAR26689 | Aar26689 HIV-PND-p |
| 121 | 72   | 93.5  | 16 | 2 | AAR33236 | Aar33236 HIV-IIIB  | 194 | 62   | 80.5 | 15 | 2 | AAR58606 | Aar58606 Alkaline  |
| 122 | 72   | 93.5  | 17 | 1 | AAP95348 | AAP95348 Variable  | 195 | 60   | 77.9 | 14 | 2 | AAR33336 | Aar33336 Sequence  |
| 123 | 72   | 93.5  | 17 | 1 | AAP95349 | AAP95349 Variable  | 196 | 60   | 77.9 | 14 | 2 | AAR48604 | Aar48604 Sequence  |
| 124 | 72   | 93.5  | 17 | 2 | AAR29241 | Aar29241 V3 loop r | 197 | 60   | 77.9 | 14 | 2 | AAR09264 | Aar09264 HIV-1 str |
| 125 | 72   | 93.5  | 17 | 2 | AAR32407 | Aar32407 Sequence  | 198 | 58   | 75.3 | 11 | 2 | AAR62167 | Aar62167 HIV-1 gp1 |
| 126 | 72   | 93.5  | 17 | 2 | AAR68664 | Aar68664 T cell ep | 199 | 58   | 75.3 | 11 | 2 | AAR76852 | Aar76852 Fusion im |
| 127 | 72   | 93.5  | 17 | 2 | AAR25834 | Aar25834 HIV B-cel | 200 | 58   | 75.3 | 13 | 5 | AB05777  | AB05777 HIV gp120  |
| 128 | 72   | 93.5  | 17 | 2 | AAR76848 | Aar76848 Fusion im | 201 | 58   | 75.3 | 13 | 5 | AB015659 | AB015659 Strong im |
| 129 | 72   | 93.5  | 17 | 2 | AAR67350 | Aar67350 HIV-1 str | 202 | 58   | 75.3 | 19 | 2 | AAR24218 | Aar24218 CD4+ T-ly |
| 130 | 72   | 93.5  | 17 | 2 | AAR99958 | Aar99958 HIV-1 vac | 203 | 57   | 74.0 | 11 | 2 | AAR32408 | Aar32408 Sequence  |
| 131 | 72   | 93.5  | 17 | 2 | AAR39756 | Aar39756 HIV1 chim | 204 | 57   | 74.0 | 11 | 4 | AAR99430 | Aar99430 Vaccine r |
| 132 | 72   | 93.5  | 17 | 7 | ADN14075 | ADN14075 HIV helpe | 205 | 57   | 74.0 | 11 | 4 | AAR68799 | Aar68799 Cytotoxic |
| 133 | 72   | 93.5  | 17 | 8 | ADRI8895 | ADRI8895 HIV-1 V3  | 206 | 57   | 74.0 | 11 | 4 | ABP17102 | ABP17102 HIV B27 s |
| 134 | 72   | 93.5  | 18 | 2 | AAR38526 | Aar38526 Cyclic HI | 207 | 57   | 74.0 | 12 | 2 | ABP10592 | ABP10592 Protease  |
| 135 | 72   | 93.5  | 18 | 2 | AAR03404 | Aar03404 HIV princ | 208 | 57   | 74.0 | 15 | 2 | AAR62164 | Aar62164 HIV-1 gp1 |
| 136 | 72   | 93.5  | 18 | 8 | ADRI8878 | ADRI8878 HIV-1 V3- | 209 | 57   | 74.0 | 15 | 2 | AAR76846 | Aar76846 Fusion im |
| 137 | 72   | 93.5  | 20 | 2 | AAR25471 | Aar25471 V3 loop s | 210 | 57   | 74.0 | 15 | 8 | ADP76013 | ADP76013 Peptide e |
| 138 | 72   | 93.5  | 20 | 2 | AAR76842 | Aar76842 Fusion im | 211 | 57   | 74.0 | 17 | 2 | AAR25139 | Aar25139 SFV-HIV e |
| 139 | 72   | 93.5  | 20 | 6 | ABP57070 | ABP57070 HIV gp120 | 212 | 57   | 74.0 | 21 | 2 | AAR68645 | Aar68645 VP hybrid |
| 140 | 71   | 92.2  | 15 | 2 | AAR66425 | Aar66425 HIV-1 III | 213 | 57   | 74.0 | 21 | 2 | AAR25815 | Aar25815 Chimaeic  |
| 141 | 71   | 92.2  | 15 | 2 | AAR66420 | Aar66420 HIV-1 III | 214 | 57   | 74.0 | 21 | 2 | AAR67331 | Aar67331 HIV-1 pep |
| 142 | 71   | 92.2  | 15 | 2 | AAR66429 | Aar66429 HIV-1 III | 215 | 57   | 74.0 | 21 | 2 | AAR99939 | Aar99939 HIV-1 vac |
| 143 | 71   | 92.2  | 15 | 2 | AAR66423 | Aar66423 HIV-1 III | 216 | 57   | 74.0 | 21 | 2 | AAY39690 | Aay39690 HIV1 ggg  |
| 144 | 71   | 92.2  | 15 | 2 | AAR66432 | Aar66432 HIV-1 III | 217 | 55.5 | 72.1 | 14 | 2 | AAR66418 | Aar66418 HIV-1 III |
| 145 | 69   | 89.6  | 15 | 2 | AAR66421 | Aar66421 HIV-1 III | 218 | 54   | 70.1 | 15 | 2 | AAR90229 | Aar90229 Cyclic HI |
| 146 | 68   | 88.3  | 13 | 2 | AAR62890 | Aar62890 Peptide s | 219 | 53   | 68.8 | 10 | 2 | AAR62165 | Aar62165 HIV-1 gp1 |
| 147 | 68   | 88.3  | 13 | 2 | AAR62897 | Aar62897 HIV-1 str | 220 | 53   | 68.8 | 10 | 2 | AAR76861 | Aar76861 Fusion im |
| 148 | 68   | 88.3  | 13 | 4 | AAR99433 | Aar99433 Vaccine r | 221 | 53   | 68.8 | 13 | 2 | AAR03409 | Aar03409 HIV princ |
| 149 | 68   | 88.3  | 14 | 2 | AAR66417 | Aar66417 HIV-1 III | 222 | 53   | 68.8 | 14 | 2 | AAR04441 | Aar04441 Human imm |
| 150 | 68   | 88.3  | 15 | 2 | AAR76897 | Aar76897 Fusion im | 223 | 53   | 68.8 | 14 | 2 | AAR68665 | Aar68665 T cell ep |
| 151 | 68   | 88.3  | 15 | 4 | AAR99083 | Aar99083 Vaccine r | 224 | 53   | 68.8 | 14 | 2 | AAR25835 | Aar25835 HIV B-cel |
| 152 | 68   | 88.3  | 18 | 2 | AAR63062 | Aar63062 Human imm | 225 | 53   | 68.8 | 14 | 2 | AAR67351 | Aar67351 HIV-1 str |
| 153 | 68   | 88.3  | 21 | 2 | AAR79180 | Aar79180 Fusion im | 226 | 53   | 68.8 | 14 | 2 | AAR99959 | Aar99959 HIV-1 vac |
| 154 | 68   | 88.3  | 21 | 2 | AAR76901 | Aar76901 Fusion im | 227 | 53   | 68.8 | 14 | 2 | AAY39757 | Aay39757 HIV1 chim |
| 155 | 68   | 88.3  | 24 | 2 | AAR04475 | Aar04475 Human imm | 228 | 53   | 68.8 | 18 | 2 | AAY22593 | Aay22593 HIV putat |
| 156 | 68   | 88.3  | 25 | 2 | AAR32887 | Aar32887 HIV envel | 229 | 53   | 68.8 | 20 | 2 | AAR26879 | Aar26879 HIV epito |
| 157 | 67   | 87.0  | 15 | 2 | AAP95356 | AAP95356 Variable  | 230 | 52   | 67.5 | 10 | 2 | AAR26892 | Aar26892 HIV epito |
| 158 | 67   | 87.0  | 17 | 1 | AAR68680 | Aar68680 B cell ep | 231 | 52   | 67.5 | 10 | 2 | AAR33452 | Aar33452 Sequence  |
| 159 | 67   | 87.0  | 20 | 2 | AAR68680 | Aar68680 HIV-1 str | 232 | 52   | 67.5 | 10 | 2 | AAR95920 | Aar95920 HIV gp 12 |
| 160 | 67   | 87.0  | 20 | 2 | AAR25898 | Aar25898 HIV-1 str | 233 | 52   | 67.5 | 10 | 2 | AAR76839 | Aar76839 Fusion im |
| 161 | 67   | 87.0  | 20 | 2 | AAR25850 | Aar25850 HIV-1 str | 234 | 52   | 67.5 | 10 | 2 | AAY10172 | Aay10172 T cell ep |
| 162 | 67   | 87.0  | 20 | 2 | AAR67366 | Aar67366 HIV-1 str | 235 | 52   | 67.5 | 10 | 2 | AAY10164 | Aay10164 T cell ep |
| 163 | 67   | 87.0  | 20 | 2 | AAR99974 | Aar99974 HIV-1 vac | 236 | 52   | 67.5 | 10 | 2 | AAY03691 | Aay03691 Amino aci |
| 164 | 67   | 87.0  | 20 | 3 | AAY39699 | Aay39699 HIV1 chim | 237 | 52   | 67.5 | 10 | 2 | AAY03655 | Aay03655 HIV gag C |
| 165 | 66.5 | 86.4  | 18 | 3 | AAY96191 | Aay96191 Glycoprot | 238 | 52   | 67.5 | 10 | 2 | AAY05357 | Aay05357 HIV-1 CUU |
| 166 | 66   | 85.7  | 14 | 2 | AAR76863 | Aar76863 Fusion im | 239 | 52   | 67.5 | 10 | 2 | AAY03655 | Aay03655 HIV-1 env |
| 167 | 66   | 85.7  | 15 | 2 | AAR36156 | Aar36156 HIV-1 str | 240 | 52   | 67.5 | 10 | 3 | AAY59593 | Aay59593 HIV-1 env |
| 168 | 66   | 85.7  | 15 | 5 | AAM49356 | Aam49356 HIV-1 fbo | 241 | 52   | 67.5 | 10 | 3 | AAY67361 | Aay67361 Human imm |
| 169 | 66   | 85.7  | 15 | 7 | ADH39121 | ADH39121 HIV-1 gp1 | 242 | 52   | 67.5 | 10 | 3 | AAY94398 | Aay94398 HIV pepcl |
| 170 | 66   | 85.7  | 15 | 7 | ADH60862 | ADH60862 HIV gp120 | 243 | 52   | 67.5 | 10 | 3 | AAY94588 | Aay94588 Mouse H2- |
| 171 | 66   | 85.7  | 16 | 8 | ADRI8885 | ADRI8885 V3-IIIB b | 244 | 52   | 67.5 | 10 | 3 | AAY94588 | Aay94588 Mouse H2- |

245 52 67.5 10 3 AAB15874 Human che  
 246 52 67.5 10 4 AAB92350 Virus rel  
 247 52 67.5 10 4 AAB49397 HIV pepti  
 248 52 67.5 10 4 AAE04801 Human imm  
 249 52 67.5 10 5 AAE20153 Human imm  
 250 52 67.5 10 5 ABG31255 GP120 cla

## ALIGNMENTS

## RESULT 1

AAP82095  
 ID AAP82095 standard; peptide; 15 AA.

XX AC AAP82095;  
 XX DT 25-MAR-2003 (revised)  
 XX DT 17-DEC-2001 (revised)  
 XX DT 29-OCT-1990 (first entry)  
 XX DE Env-K1 peptide.  
 XX KW Env-K1; gp160 Env protein; T-cell cytotoxicity; HIV.  
 XX OS Synthetic.  
 XX PN USN7148692-N.  
 XX PD 02-AUG-1988.  
 XX PF 26-JAN-1988; 88US-00148692.  
 XX PR 26-JAN-1988; 88US-00148692.  
 XX PA (USSH ) US DEPT HEALTH & HUMAN SERVICE.  
 XX PA (USDC ) US SEC OF COMMERCE.  
 XX PI Berzofsky J, Takahashi H, Hosmalin A, Germain R, Moss B;  
 XX DR WPI; 1988-264280/37.  
 XX DT Synthetic peptide corresp. to HIV GP 160 ENV sequence - which elicits  
 XX PT cytotoxicity by T cells against HIV and proliferation of HIV-specific  
 XX PT cytotoxic T cells.  
 XX PS Disclosure; Page ?; 31pp; English.

XX CC This peptide elicits cytotoxicity by T-cells against HIV antigens and  
 CC stimulates prodn. of HIV-specific cytotoxic T-lymphocytes (CTLs). It is  
 CC specific for the HIV envelope protein gp160. (Note: Revised entry  
 CC submitted to correct the patent number format of US Government-owned NTIS  
 CC applications to prevent clashes with ongoing US granted patent numbers.  
 CC For further information please visit the Derwent web site at  
 CC www.derwent.com/dwpi/updates/ntis.us.html.) (Updated on 25-MAR-2003 to  
 CC correct PF field.) (Updated on 25-MAR-2003 to correct PA field.)

XX SQ Sequence 15 AA;

Query Match 100.0%; Score 77; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RIQRPGRFAVTVIGK 15  
 |||||

DB 1 RIQRPGRFAVTVIGK 15

## RESULT 2

AAP91228  
 ID AAP91228 standard; peptide; 15 AA.

XX AC AAP91228;

XX 24-OCT-2003 (revised)  
 DT 27-AUG-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 13-AUG-1990 (first entry)  
 XX DE Peptide comprising AAs 308-322 of HIV-I IIIB env protein.

XX KW AIDS; HIV-I; vaccine.

XX OS Human immunodeficiency virus 1.

XX PN EP339504-A.

XX PD 02-NOV-1989.

XX PF 21-APR-1989; 89EP-00107197.

XX PR 26-APR-1988; 88US-00186333.

XX PR 20-MAR-1989; 89US-00324027.

XX PA (DUPO ) DU PONT DE NEMOURS & CO E I.  
 XX PA (DUPO ) DU PONT MERCK PHARMACEUTICAL CO.

XX PI Kenealy WR, Petteway SR, Durda PJ;

XX DR WPI; 1989-317386/44.

XX CC Synthetic human immuno-deficiency virus env-coded peptide(s) - induce  
 CC antibodies that block human immuno-deficiency virus proliferation and  
 CC fusion between infected and non-infected cells.

XX PS Claim 3; Page 21; 24pp; English.

XX CC Peptide will induce an immune response in subject, and will thus act as a  
 CC non-infective vaccine, prophylactic or have therapeutic value for AIDS  
 CC patients. (Updated on 25-MAR-2003 to correct PA field.) (Updated on 27-  
 CC AUG-2003 to correct OS field.) (Updated on 24-OCT-2003 to standardise OS  
 CC field)

XX SQ Sequence 15 AA;

Query Match 100.0%; Score 77; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RIQRPGRFAVTVIGK 15  
 |||||

DB 1 RIQRPGRFAVTVIGK 15

## RESULT 3

AAR21343  
 ID AAR21343 standard; protein; 15 AA.

XX AC AAR21343;

XX DT 25-MAR-2003 (revised)

XX DT 16-MAY-1992 (first entry)

XX DE HIV-1 gp120 epitope found in mouse immunoglobulin BAT123 and mouse/human  
 XX DE chimeric antibody CAG1-51-4.

XX KW Chimeric immunoglobulin; viral-neutralising; HIV-1;

XX KW BAT123 mouse immunoglobulin; viral antigen-binding region; immunotherapy;

XX KW AIDS; ARC; ss.

XX OS Human immunodeficiency virus 1.

XX PN WO9201719-A.

XX PD 06-FEB-1992.

XX XX

PF 18-JUL-1990; 90WO-US004048.  
 PR 18-JUL-1990; 90WO-US004048.  
 XX  
 XX (TANO-) TANOX BIOSYST INC.  
 PA  
 XX Liov RS, Rosen EM, Sun BN, Fung MS, Chang TW, Chang NT;  
 PI  
 XX WPI; 1992-064897/08.  
 DR  
 XX  
 XX New chimeric HIV-1-neutralising immunoglobulin(s) - comprising non-human  
 PT antigen binding regions and constant human region, for immuno-therapy of  
 PT AIDS and ARC.  
 PT  
 PS Example; Page 26; 39pp; English.  
 XX  
 XX The inventors claim a chimeric, viral-neutralising immunoglobulin which  
 CC binds to the gp120 region of HIV-1 with a potency and immunologic  
 CC specificity equal to BAT123 mouse Ig. It comprises a viral-specific  
 CC antigen-binding region of non-human origin and a constant region of  
 CC human origin. Specifically claimed is the chimeric immunoglobulin CGP  
 CC 47439. Probes V-kappa-1 and V-kappa-2 (AAQ21497, AAQ21498) were used to  
 CC screen a genomic DNA library for BAT123 cells for the functionally  
 CC rearranged variable region gene of BAT123 light chain (VL). The  
 CC identified clone, V-kappa-123-23, was used in the subsequent construction  
 CC of the mouse/human chimeric L chain gene. Probe VH-1 was used to screen  
 CC partial genomic libraries for the functionally rearranged variable region  
 CC genes for BAT123 heavy chain (VH). Clone VH-123-E3 hybridised with the  
 CC probe. This clone was used in the construction of the mouse-human  
 CC chimeric H chain gene. The chimeric antibody CAG1-51-4 was found to bind  
 CC to the same oligopeptide (AAR21343) as BAT123 which indicates that the  
 CC antigen specificity of the murine antibody BAT123 was preserved upon  
 CC conversion into a mouse/human chimeric antibody. (Updated on 25-MAR-2003  
 CC to correct PR field.)  
 XX  
 XX  
 SQ Sequence 15 AA;  
 Query Match 100.0%; Score 77; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQRGPGRAFTVIGK 15  
 Db  
 1 RIQRGPGRAFTVIGK 15  
 RESULT 4  
 AAR38187  
 ID AAR38187 standard; peptide; 15 AA.  
 XX  
 AC AAR38187;  
 XX  
 DT 27-AUG-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 12-OCT-1993 (first entry)  
 XX  
 DE V3 loop peptide D44 (R15K).  
 XX  
 KW gp120; HIV-1; cytotoxic T-lymphocyte; CTL; T-helper; AIDS; infection.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN WO9310816-A1.  
 XX  
 PD 10-JUN-1993.  
 XX  
 PF 02-DEC-1992; 92WO-US010378.  
 XX  
 PR 02-DEC-1991; 91US-00800932.  
 PR 16-SEP-1992; 92US-00945865.  
 XX  
 XX (TEXA) UNIV TEXAS SYSTEM.  
 PA  
 XX

PI Sastry JK, Arlinghaus RB, Platsoucas CD, Nehete PN;  
 XX WPI; 1993-196739/24.  
 DR  
 XX  
 XX Peptide composition for treating and preventing viral infections -  
 PT comprise CTL-inducing epitope and HIV infection-inhibiting sequence or T  
 PT helper cell-inducing sequence.  
 XX  
 XX Claim 13 + 19; Page 94-95; 130pp; English.  
 PS  
 XX HIV gp120 V3 loop-derived peptides (AAR38170-87) are successful in  
 CC generating CTL responses, esp. peptide R15K (AAR38187); the T-helper cell  
 CC -inducing peptide includes the sequence C19A (AAR38164); HIV infection-  
 CC inhibiting peptides are given in AAR38188-206, and are esp. peptides  
 CC R15K, N24G, E13V, R8K, T13Q and H13N (AAR38165-69). The peptides may also  
 CC be derived from an influenza virus protein or a sendai virus protein  
 CC (AAR41014-15). It was observed that peptide R15K (amino acids 315-329),  
 CC with sequences derived from the V3 loop of HIV-1 IIIB, inhibits HIV-1  
 CC infection of primary human T cells by 92% at 1 microg/ml (ca. 0.4-0.6  
 CC microm). (Updated on 25-MAR-2003 to correct PN field.) (Updated on 27-AUG  
 CC -2003 to correct OS field.)  
 XX  
 XX Sequence 15 AA;  
 SQ  
 Query Match 100.0%; Score 77; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQRGPGRAFTVIGK 15  
 Db  
 1 RIQRGPGRAFTVIGK 15  
 RESULT 5  
 AAR32207  
 ID AAR32207 standard; peptide; 15 AA.  
 XX  
 AC AAR32207;  
 XX  
 DT 24-OCT-2003 (revised)  
 DT 17-DEC-2001 (revised)  
 DT 07-JUN-1993 (first entry)  
 XX  
 DE Sequence of peptide which corresp. to AA residues 315-329 of the V3 loop  
 DE of the gp160 envelope glycoprotein in HIV-1 strain MN.  
 XX  
 XX V3 loop; envelope glycoprotein; gp160; HIV-1; prophylaxis; immunotherapy.  
 KW  
 OS Human immunodeficiency virus; (HIV-1) isolate IIIB.  
 XX  
 PN USN7760530-N.  
 XX  
 PD 15-DEC-1992.  
 XX  
 PF 18-SEP-1991; 91US-00760530.  
 XX  
 PR 18-SEP-1991; 91US-00760530.  
 XX  
 XX (USSH) US DEPT HEALTH & HUMAN SERVICE.  
 PA  
 XX Berzofsky JA, Takahashi H, Germain RN;  
 PI  
 XX WPI; 1993-058406/07.  
 DR  
 XX Peptide(s) corresponding to the V3 loop of gp-160 of HIV-1 - elicit  
 PT cytotoxic T lymphocyte(s) active against broad range of HIV-1 isolate(s).  
 PT  
 XX Example; Page 19; 41pp; English.  
 PS  
 XX The peptide corresponds to amino acid residues numbered 315-329 in the V3  
 CC loop of the envelope glycoprotein gp160 of human immunodeficiency virus  
 CC (HIV-1), as numbered by Ratner in the strain MN. It is useful for the  
 CC prophylaxis or immunotherapy of HIV-1 infection. It elicits an immunised  
 PA



CC subject cytotoxic T lymphocyte (CTL) activity against the corresp.  
 CC clinical isolate of HIV-1. (Note: Revised entry submitted to correct the  
 CC patent number format of US Government-owned NTIS applications to prevent  
 CC clashes with ongoing US granted patent numbers. For further information  
 CC please visit the Derwent web site at  
 CC www.derwent.com/dwpi/updates/ntis\_us.html.) (Updated on 24-OCT-2003 to  
 CC standardise OS field)  
 XX  
 SQ Sequence 15 AA;

Query Match 100.0%; Score 77; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGGRFVTIGK 15  
 |||||  
 DB 1 RIQPGGGRFVTIGK 15

## RESULT 6

AARS1619  
 ID AARS1619 standard; protein; 15 AA.

XX  
 AC AARS1619;

XX 27-AUG-2003 (revised)

DT 25-MAR-2003 (revised)

DT 21-OCT-1994 (first entry)

XX V3 loop region of gp120 of HIV.

DE gp 120; HIV epitope; Human Immunodeficiency Virus fusion polypeptide.

KW Human immunodeficiency virus.  
 XX  
 OS WO9406469-A1.

XX 31-MAR-1994.

XX 18-SEP-1992; 92WO-US007966.

XX 18-SEP-1992; 92WO-US007966.

XX (LJOL-) LA JOLLA INST ALLERGY & IMMUNOLOGY.

XX Altman A, Baier GJ;

XX WPI; 1994-118166/14.

XX New fusion polypeptide of antigen binding domain and HIV epitope - useful  
 PT as vaccine for treatment or prevention of HIV infection, ensures  
 PT efficient focusing of epitopes on surface of antigen presenting cells.  
 XX  
 PS Example 1; Page 24; 39pp; English.

CC AARS1619 shows a region of the V3 loop (residues 315-329) of the envelope  
 CC glycoprotein, gp120, of HIV-1. It represents an epitope which forms part  
 CC of a hybrid-fusion polypeptide with a Fab fragment of an IgG Fab  
 CC fragment. The polypeptide is capable of presenting the epitope to antigen  
 CC presenting cells. (Updated on 25-MAR-2003 to correct PN field.) (Updated  
 CC on 27-AUG-2003 to correct OS field.)  
 XX  
 SQ Sequence 15 AA;

Query Match 100.0%; Score 77; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGGRFVTIGK 15  
 |||||  
 DB 1 RIQPGGGRFVTIGK 15

## RESULT 7

AAR74603  
 ID AAR74603 standard; peptide; 15 AA.

XX  
 AC AAR74603;

XX 16-OCT-2003 (revised)

DT 25-MAR-2003 (revised)

DT 01-NOV-1995 (first entry)

XX HIV-1 variable loop residues 308-322.

XX MAB 5023; variable V3 loop; HIV-1; human immunodeficiency virus;  
 KW cancer antigen; monoclonal antibody.  
 XX  
 OS Human immunodeficiency virus; I.

XX WO9510777-A1.

XX 20-APR-1995.

XX 14-OCT-1994; 94WO-US011754.

XX 15-OCT-1993; 93US-00138141.

XX (RAKO/) RAKOWICZSZULCZYNSKA E M.

XX Rakowiczszulczynska EM;

XX WPI; 1995-178531/23.

XX Detection of HIV-1 cross-reactive breast carcinoma-associated antigens -  
 PT for diagnosis and anti-sense therapy of breast and gynaecological  
 PT cancers.  
 XX  
 PS Disclosure; Page 48; 71pp; English.

XX MAB 5023 was developed against AA residue 308-322 of the variable loop of  
 CC HIV-1 (AAR74603). MAB 5023 binds to the epitope GRAF. G preceding RAF is  
 CC believed to critical for internalization. MAB 5023 recognised p160, p120,  
 CC p42 and p24 in cancer cells. AAR74603 competitively blocked binding of  
 CC the MAB to the cancer antigens, indicating that at least the epitope  
 CC GRAF, which is recognised by the MAB, must also be present in cancer  
 CC antigens. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 25-  
 CC MAR-2003 to correct PI field.) (Updated on 16-OCT-2003 to standardise OS  
 CC field)  
 XX  
 SQ Sequence 15 AA;

Query Match 100.0%; Score 77; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGGRFVTIGK 15  
 |||||  
 DB 1 RIQPGGGRFVTIGK 15

## RESULT 8

AAR66414  
 ID AAR66414 standard; peptide; 15 AA.

XX  
 AC AAR66414;

XX 25-MAR-2003 (revised)

DT 03-AUG-1995 (first entry)

XX HIV-1 IIIB peptide 18.

XX T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KW cluster peptide; principal neutralising determinant; IIIB isolate.  
 XX

OS Synthetic.  
 XX WO9426785-A1.  
 PN  
 XX 24-NOV-1994.  
 PD  
 XX 13-MAY-1994; 94WO-US005142.  
 PF  
 XX 14-MAY-1993; 93US-00060988.  
 PR  
 XX (USSH ) US SEC DEPT HEALTH.  
 PA  
 XX Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
 PI WPI; 1995-006707/01.  
 XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 DR responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 PT  
 XX Example 1; Page 33; 120pp; English.  
 PS  
 XX Synthetic peptides spanning multideterminant regions from the HIV  
 CC envelope protein gp160 have been designed and are designated cluster  
 CC peptides (PCLUS). These peptides each consist of a cluster of overlapping  
 CC determinants and are known to induce in vitro T cell proliferation and  
 CC cytokine production in mice and humans of multiple MHC types. The cluster  
 CC peptides were co-linearly synthesised at the N-terminus of an  
 CC immunodominant CTL determinant, Peptide 18 (AAR66414), corresp. to part  
 CC of the gp160 V3 loop and principal neutralising determinant region of HIV  
 CC -1 IIB isolate. (Updated on 25-MAR-2003 to correct PN field.)  
 CC  
 XX Sequence 15 AA;  
 SQ

Query Match 100.0%; Score 77; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFVTIGK 15  
 DB |||||

RESULT 9  
 AAR68789  
 ID AAR68789 standard; peptide; 15 AA.  
 XX  
 AC AAR68789;  
 XX  
 XX 25-MAR-2003 (revised)  
 DT 23-AUG-1995 (first entry)  
 XX  
 XX Cytotoxic T lymphocyte epitope 46 derived from env gp120 protein.  
 DE  
 XX cytotoxic T lymphocyte; epitope; antigen; pathogenic; nef; gag; pol; env;  
 KW gp120; gp41; HIV; cell-mediated immunity; human immunodeficiency virus;  
 KW Class I restricted.  
 XX  
 XX Human immunodeficiency virus.  
 OS  
 XX WO9428871-A1.  
 PN  
 XX 22-DEC-1994.  
 PD  
 XX 07-JUN-1994; 94WO-US006394.  
 PF  
 XX 07-JUN-1993; 93US-00072718.  
 PR  
 XX (ENDO-) ENDOCON INC.  
 PA  
 XX Leonard RJ;  
 PI  
 XX WPI; 1995-036067/05.  
 DR

XX Implant for sustained release of pathogen-associated antigen - forming  
 PT chronic inflammatory site producing cytotoxic T-lymphocytes lysing  
 PT infected cells, esp. for treating AIDS.  
 XX  
 XX Disclosure; Page 12; 35pp; English.  
 XX  
 XX AAR68744-805 are cytotoxic T lymphocyte (CTL) class I and II restricted  
 CC epitopes derived from human immunodeficiency virus proteins. AAR68789  
 CC corresponds to amino acid residues 308-322 of the env gp120 protein.  
 CC These antigens are examples of peptides that can be used with an  
 CC immunogenic implant. The implant is associated with an antigen associated  
 CC with a pathogen and used to form a discrete, localised chronic  
 CC inflammation site which acts as a local 'factory' for prodn. of CTL's  
 CC which lyse cells infected with a specific pathogen. The expanded set of  
 CC pathogen-specific CTL's can eradicate or prevent development of  
 CC infection, and can also be used to treat or arrest the development of  
 CC cancers associated with infection. (Updated on 25-MAR-2003 to correct PN  
 CC field.)  
 XX Sequence 15 AA;  
 SQ

Query Match 100.0%; Score 77; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFVTIGK 15  
 DB |||||

RESULT 10  
 AAW05535  
 ID AAW05535 standard; peptide; 15 AA.  
 XX  
 AC AAW05535;  
 XX  
 XX 16-OCT-2003 (revised)  
 DT 17-JAN-1997 (first entry)  
 XX  
 XX HIV-1 gp120 peptide (aa308-322).  
 DE  
 XX gC1q receptor; gC1q-R; HIV-1; gp120; immunogen; vaccine.  
 KW  
 XX Human immunodeficiency virus 1; strain HXB2R.  
 OS  
 XX WO9630400-A1.  
 PN  
 XX 03-OCT-1996.  
 PD  
 XX 22-MAR-1996; 96WO-US003905.  
 PF  
 XX 24-MAR-1995; 95US-00410360.  
 PR  
 XX (TANO-) TANOX BIOSYSTEMS INC.  
 PA  
 XX Pung MSC, Sun BNV, Sun CRY, Kim YW, Yu L;  
 PI WPI; 1996-455274/45.  
 XX  
 XX New gC1q receptor-based, HIV-1 gp 120 binding peptide (s) - for preventing  
 PT and treating HIV-1 infection.  
 PT  
 XX Claim 10; Page 49; 53pp; English.  
 PS  
 XX A peptide (AAW05535) corresponds to amino acids 308-322 of the V3 region  
 CC of gp120 from HIV-1 strain HXB2R2. It was used to examine the binding of  
 CC gC1q receptor (gC1q-R) (see also AAW05534) to HIV-1 gp120. Anti-HIV-1  
 CC gp120 V3 domain murine monoclonal antibody BART23 was able to react with  
 CC gp120 bound to gC1q-R, showing that the binding of gC1q-R to gp120 does  
 CC not involve the V3 region of gp120; the binding site was localised to  
 CC amino acids 444-459 (see also AAW05533) of gp120. (Updated on 16-OCT-2003  
 CC to standardise OS field)

```
XX SQ Sequence 15 AA;
Query Match 100.0%; Score 77; DB 2; Length 15;
Best Local Similarity 100.0%; Pred. No. 9e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15
Db 1 RIQRGPGRAFTVIGK 15

RESULT 11
AAR92007
ID AAR92033 standard; peptide; 15 AA.
XX AC AAR92033;
XX DT 29-MAY-1996 (first entry)
XX DE Hydrophilic peptide for epimorphin modification (5).
XX KW Epimorphin; human; mouse; wound; burn; epithelial tissue; diagnosis;
XX KW treatment; morphogenetic abnormality; cosmetic; hair growth stimulator.
XX OS Synthetic.
XX PN EP698666-A2.
XX PD 28-FEB-1996.
XX PF 20-JUN-1995; 95EP-00304270.
XX PR 21-JUN-1994; 94JP-00162874.
XX PR 31-MAR-1995; 95JP-00099979.
XX PR 31-MAR-1995; 95JP-00099980.
XX PA (SUME ) SUMITOMO ELECTRIC IND CO.
XX PI Hirai Y, Koshida S, Oka Y;
XX DR WPI; 1996-118213/13.
XX PT Novel polypeptide containing an epimorphin functional domain - has
XX PT possible benefits in epithelial tissue treatments, e.g. burns and for
XX PT artificial organs.
XX PS Claim 8; Page 57; 62pp; English.
XX CC New polypeptides contain a first portion of 5-99 amino acids joined to a
XX CC second portion contg. at least a functional domain of epimorphin. The
XX CC first portion may be selected from the peptides given in AAR92029 to
XX CC AAR92036. The second portion may be full-length epimorphin (see AAR92037
XX CC to AAR92042 for human and mouse epimorphins). Fragments of epimorphins
XX CC given in AAT16083 to AAT16090 are used in the prodn. of modified
XX CC epimorphins. The modified epimorphins are useful for the development of
XX CC diagnosis and treatment of morphogenetic abnormalities of epithelial
XX CC tissue or novel remedies for wounds, eg burns, after surgery and for
XX CC artificial organs. They may also be used as components of cosmetics, hair
XX CC growth stimulators, etc
SQ Sequence 15 AA;
Query Match 100.0%; Score 77; DB 2; Length 15;
Best Local Similarity 100.0%; Pred. No. 9e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15
Db 1 RIQRGPGRAFTVIGK 15

RESULT 12
```

```
AAW07931
ID AAW07931 standard; peptide; 15 AA.
XX AC AAW07931;
XX DT 16-OCT-2003 (revised)
XX DT 31-JAN-1997 (first entry)
XX DE gp120 peptide p18p.
XX KW HIV; gp120; HIV-IIIB strain; HIV-1 transmission; foetal transmission;
XX KW neutralising antibody; passive immunisation; anti-idiotypic antibody;
XX KW gp41; vaccine; active immunotherapy.
XX OS Human immunodeficiency virus 1.
XX PN US5556744-A.
XX PD 17-SEP-1996.
XX PF 24-MAR-1994; 94US-00218025.
XX PR 29-MAY-1992; 92US-00891451.
XX PA (UYPE-) UNIV PENNSYLVANIA.
XX PA (WIST-) WISTAR INST ANATOMY & BIOLOGY.
XX PI Williams WV, Weiner DB, Ugen KE;
XX DR WPI; 1996-432980/43.
XX PT Determining the likelihood of maternal transmission of HIV-1 to foetus -
XX PT by measuring maternal reactivity with specific gp120 and gp41 derived
XX PT peptide(s), also used for diagnosing HIV in infants.
XX PS Example 2; Col 18; 63pp; English.
XX CC This sequence represents a HIV gp120 peptide that can be used in the
XX CC method of the invention. The method of the invention is for determining
XX CC whether or not a mother will transmit HIV-1 to a foetus. The method
XX CC comprises incubating a sample from the HIV-infected mother, with a
XX CC collection of HIV peptides. The HIV peptides includes at least one of the
XX CC gp120 sequences (such as AAW07909-W07917), and at least one HIV gp41
XX CC derived peptide (see AAW07918-W07928). The number of peptides that react
XX CC with the sample is determined, and this number is compared with a
XX CC standard that shows pattern reactivity for a patient of transmission
XX CC status. A non-transmissible HIV sample is indicated if the test sample
XX CC reacts with twice as many peptides as the standard. The method detects
XX CC the presence of neutralising antibodies that protect against mother to
XX CC infant transmission of HIV. These sequences can also be used in vaccines
XX CC to protect against transmission. Antibodies against these sequences can
XX CC be used for passive immunisation, and to generate anti-idiotypic
XX CC antibodies for use in vaccines or active immunotherapy. (Updated on 16-
XX CC OCT-2003 to standardise OS field)
XX SQ Sequence 15 AA;
Query Match 100.0%; Score 77; DB 2; Length 15;
Best Local Similarity 100.0%; Pred. No. 9e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15
Db 1 RIQRGPGRAFTVIGK 15

RESULT 13
AAR92007
ID AAR92007 standard; protein; 15 AA.
XX AC AAR92007;
XX DT 16-OCT-2003 (revised)
```

DT 27-SEP-1996 (first entry)  
 XX HIV-1 V3 loop epitope, for insertion in Mycobacterium alpha antigen.  
 DE  
 XX Mycobacterium bovis BCG; AIDS vaccine; surface protein; alpha antigen;  
 KW Human immunodeficiency virus type 1; fusion protein; gp120 epitope;  
 KW V3 loop.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN WO9604009-A1.  
 XX  
 PD 15-FEB-1996.  
 XX  
 PF 31-JUL-1995; 95WO-JP001515.  
 XX  
 PR 29-JUL-1994; 94JP-00178462.  
 XX  
 PA (AJIN ) AJINOMOTO CO INC.  
 PA (NINA-) JAPAN AGENCY NAT INST HEALTH.  
 XX  
 PI Matsuo K, Chujo Y, Yamazaki A, Honda M, Yamazaki S, Tasaka H;  
 DR WPI; 1996-129127/13.  
 DR N-PSDB; AAT16048, AAT16049.  
 XX  
 CC BCG containing vaccine secretes chimeric protein containing foreign  
 PT antigen - has enhanced immunogenicity and antigenicity esp. when used as  
 PT an anti-AIDS vaccine.  
 XX  
 PS Example 2; Page 17; 56pp; Japanese.  
 XX  
 CC Antigenic peptides can be inserted into the alpha-antigen sequence of a  
 CC Mycobacterium and secreted from an appropriately transformed M.bovis BCG  
 CC cell. The resulting chimeric antigen has greatly enhanced antigenicity  
 CC and immunogenicity and is recognised in vivo by B-cells which recognise  
 CC the alpha-antigen. The present sequence is that of a HIV-1 gp120 V3 loop  
 CC epitope which was incorporated into the alpha antigen. M.bovis BCG cells  
 CC secreting a chimeric protein comprising the epitope sequence are useful  
 CC as anti-AIDS vaccines. (Updated on 16-OCT-2003 to standardise OS field)  
 XX  
 SQ Sequence 15 AA;  
 Query Match 100.0%; Score 77; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQRGPGRAFTVIGK 15  
 DB 1 RIQRGPGRAFTVIGK 15  
 RESULT 14  
 AAW24219  
 ID AAW24219 standard; peptide; 15 AA.  
 XX  
 AC AAW24219;  
 XX  
 DT 17-MAR-1998 (first entry)  
 DE  
 DE CD4+ T-lymphocyte epitope to HIV-1 V3 loop derived peptide V3-LAI-P18.  
 XX  
 KW T-lymphocyte epitope; diagnosis; antigen; infectious disease;  
 KW delayed-type hypersensitivity assay; vaccine development.  
 XX  
 OS Synthetic.  
 OS Human immunodeficiency virus.  
 PN WO9727462-A2.  
 XX  
 PD 31-JUL-1997.  
 XX  
 PF 27-JAN-1997; 97WO-US001084.  
 XX

XX 26-JAN-1996; 96US-0010679P.  
 XX (USSA ) US DEPT ARMY GOVERNMENT US ARMY MEDICAL.  
 PA Sitz KV, Brix DL;  
 PI  
 XX WPI; 1997-393814/36.  
 DR  
 XX Peptide fragments containing antigen epitope(s) used to trace diseases -  
 PT used in a delayed-type hypersensitivity assay for in vivo mapping of  
 PT human T-lymphocyte epitope(s) e.g. for diagnosis, vaccine development  
 PT etc.  
 XX  
 PS Disclosure; Page 6; 14pp; English.  
 XX  
 CC Peptide fragments AAW24217-20 were used to demonstrate a new method of  
 CC tracing sources of infectious diseases. The method comprises preparing a  
 CC short (9-50 amino acid) peptide containing at least one non-conserved  
 CC epitope of an organism, injecting a composition containing the peptide  
 CC intradermally into a test subject in a delayed-type hypersensitivity  
 CC (DTH) assay and observing the injection site at intervals for induration.  
 CC In this example CD4+ T-lymphocyte epitopes to the HIV-1 V3 loop were  
 CC mapped by existing in vitro technique for two existing HIV infected  
 CC individuals and used to design peptides AAW24217-20. The method allows  
 CC the T-lymphocyte epitopes of a large antigen to be determined in vivo in  
 CC humans. The method is useful in medicine e.g. in diagnosis, monitoring  
 CC and treatment design for infectious disease exposure, active autoimmune  
 CC disease, allergic diseases and malignancy. It is especially useful for  
 CC tracing infectious diseases e.g. HIV, particularly when a sequence is  
 CC present only in certain strains of an organism, and developing suitable  
 CC vaccines. Vaccinated individuals can also be tested to verify protection  
 CC against a particular strain. The method allows in vivo mapping of T-  
 CC lymphocyte epitopes, not previously possible. The method is simpler, more  
 CC rapid and more sensitive. It can also be applied in a variety of  
 CC environments e.g. undeveloped regions since specialist equipment is not  
 CC required  
 XX  
 SQ Sequence 15 AA;  
 Query Match 100.0%; Score 77; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQRGPGRAFTVIGK 15  
 DB 1 RIQRGPGRAFTVIGK 15  
 RESULT 15  
 AAW10348  
 ID AAW10348 standard; peptide; 15 AA.  
 XX  
 AC AAW10348;  
 XX  
 DT 15-OCT-1997 (first entry)  
 DE  
 DE HIV epitope env P18-IIIB amino acid residues 315-329 of gp160.  
 XX  
 KW Human immunodeficiency virus type-1; HIV-1; T cell response; detection;  
 KW peripheral blood mononuclear cell; PBMC.  
 XX  
 OS Synthetic.  
 OS WO9641189-A1.  
 PN  
 XX 19-DEC-1996.  
 PD  
 XX 07-JUN-1996; 96WO-US010108.  
 PF  
 XX 07-JUN-1995; 95US-00488435.  
 PR  
 XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
 PA

XX Shearer GM, Berzofsky JA, Clerici M;  
 XX WPI; 1997-108658/10.  
 XX Diagnosis of exposure to infectious agents, partic. HIV - by detecting  
 PT activation of peripheral blood mononuclear cells from patient by epitope  
 PT of infectious agent.  
 XX Claim 15; Page 62; 82pp; English.  
 XX The present sequence represents a synthetic HIV-1 gp160 peptide env P18-  
 CC IIB for use in a method for diagnosing exposure of a patient to human  
 CC immunodeficiency virus (HIV). The method involves: (a) obtaining  
 CC peripheral blood mononuclear cells (PBMC) from a patient; (b) incubating  
 CC the PBMC with at least 1 synthetic peptide representing an epitope(s) of  
 CC the infectious agent (e.g. the present sequence); and (c) determining the  
 CC activation of the PBMC as a result of the incubation in step (b). The  
 CC method can provide for the early detection of exposure to infectious  
 CC organisms, specifically HIV in this case. The method can be used to  
 CC assess exposure to HIV without concomitant infection. It also provides an  
 CC earlier identification of HIV exposure, than is provided by  
 CC seroconversion  
 XX Sequence 15 AA;  
 SQ Query Match 100.0%; Score 77; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1 RIQPGGRAFTVIGK 15  
 Db 1 RIQPGGRAFTVIGK 15  
 RESULT 16  
 AAW22031  
 ID AAW22031 standard; peptide; 15 AA.  
 AC AAW22031;  
 XX 20-FEB-1998 (first entry)  
 DT Antigenic human immunodeficiency virus peptide P18.  
 DE Antigenic peptide; human papillomavirus; MAGE gene; BAGE-1 peptide; P18;  
 KW human immunodeficiency virus; cancer antigen; tyrosinase; signal protein;  
 KW anthrax lethal factor; LF; toxin; cationic fusion peptide; translocation;  
 KW gene therapy; polycationic affinity handle; therapeutic protein; LFN.  
 XX Human immunodeficiency virus.  
 OS WO9723236-A1.  
 PN 03-JUL-1997.  
 PD 13-DEC-1996; 96WO-US020463.  
 PF 13-DEC-1995; 95US-0008518P.  
 PR 07-JUN-1996; 96US-0019275P.  
 XX (HARD ) HARVARD COLLEGE.  
 PA Collier RJ, Blanke SR, Milne JC, Lyszak EL, Ballard JD;  
 PI Starnbach MN;  
 XX WPI; 1997-350782/32.  
 DR Introducing therapeutic proteins, especially antigens, into cells - using  
 PT toxin molecules and/or polycationic handles for delivery.  
 PT Claim 15; Page 36; 67pp; English.

CC This is the antigenic human immunodeficiency virus peptide P18. This  
 CC antigenic compound can be introduced into the cytoplasm of a cell by a  
 CC new method where the cell is contacted with a fusion molecule comprising  
 CC a delivery molecule. The delivery molecule can either be a polycationic  
 CC affinity handle, LFN (the protective antigen binding domain of anthrax  
 CC lethal factor) or a toxin delivery molecule related to LFN. The antigenic  
 CC compound is linked to either of the delivery molecules by a covalent  
 CC bond. The B moiety of a toxin enhances delivery of the antigenic compound  
 CC into a cell. The anthrax toxin system of the invention eliminates the  
 CC need to generate fusion proteins with a toxin B moiety, which alleviates  
 CC problems associated with incorrect folding of lengthy fusion proteins.  
 CC Small cationic fusion peptides substituted for LFN may reduce the  
 CC possibility of steric interference with the biological activity of the  
 CC translocated protein. The method is used for the introduction of  
 CC antigens, e.g. MHC class I antigens or any other therapeutic protein,  
 CC e.g. toxin molecules, apoptosis-inducing molecules or signalling proteins  
 CC into the cells  
 XX Sequence 15 AA;  
 SQ Query Match 100.0%; Score 77; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1 RIQPGGRAFTVIGK 15  
 Db 1 RIQPGGRAFTVIGK 15  
 RESULT 17  
 AAW39275  
 ID AAW39275 standard; peptide; 15 AA.  
 AC AAW39275;  
 XX 19-MAY-1998 (first entry)  
 DT HIV-1 synthetic peptide IIB.  
 DE Human immunodeficiency virus type I; HIV-1; cytotoxic T-cell; CTC;  
 KW vaccine; prophylactic; immunotherapy.  
 XX Synthetic.  
 OS Human immunodeficiency virus 1.  
 XX US5711947-A.  
 PN 27-JAN-1998.  
 PD 23-JUL-1993; 93US-00095332.  
 PF 26-JAN-1988; 88US-00148692.  
 PR 18-SEP-1991; 91US-00760530.  
 XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
 PA Germain RN, Berzofsky JA, Takahashi H;  
 PI WPI; 1998-119931/11.  
 DR Inducing cytotoxic T-cell response to HIV - by administering gp160 vector  
 PT and chimeric gp160 peptide(s).  
 PT Example 1; Col 3; 25pp; English.  
 PS Peptides AAW39275-W39300 are used in a novel method for inducing  
 CC cytotoxic T-cell (CTC) activity specific for a broad array of HIV-1  
 CC isolates using hybrid synthetic peptides. The method involves HIV-1  
 CC administering a recombinant viral vector expressing the HIV-1 gp160  
 CC envelope glycoprotein and then administering at least 1 chimeric  
 CC synthetic polypeptide. When several synthetic polypeptides having  
 CC sequences corresponding to amino acids 315-329 of the gp160 envelope  
 CC glycoprotein of HIV-1 strain IIB, in which amino acid 325 is substituted

CC by the corresponding amino acid from other strains or isolates, are used,  
 CC a CTC response to a broad range of HIV-1 isolates can be elicited. These  
 CC synthetic peptides are useful as vaccines for the prophylaxis or  
 CC immunotherapy of HIV-1 virus infection

XX SQ Sequence 15 AA;  
 Query Match 100.0%; Score 77; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGPAFTVIGK 15  
 |||||  
 Db 1 RIQPGGPAFTVIGK 15

RESULT 18  
 AAW40316  
 ID AAW40316 standard; peptide; 15 AA.  
 XX  
 AC AAW40316;  
 XX  
 DT 17-OCT-2003 (revised)  
 DT 23-JUN-1998 (first entry)  
 XX  
 XX HIV-1 IIB gp120 peptide fragment.  
 DE  
 XX Epitope; vaccine; V3; gp120; immune response; hypervariable region;  
 KW immunoglobulin; histocompatibility antibody.  
 KW Human immunodeficiency virus 1.  
 OS  
 XX JP10072369-A.  
 PN  
 XX 17-MAR-1998.  
 PD  
 XX 02-SEP-1996; 96JP-00232378.  
 PF  
 XX 02-SEP-1996; 96JP-00232378.  
 PR  
 XX (KAGA-) KAGAKU GIUTSU SHINKO JIGYODAN.  
 PA  
 XX WPI; 1998-234701/21.  
 DR  
 XX Vaccine against human immunodeficiency virus - induces immune response  
 PT reaction to V3 epitope of virus.  
 PT  
 XX Example 1; Page 5; 8pp; Japanese.

XX This sequence represents a fragment of the human immunodeficiency virus  
 CC (HIV) Type 1 strain IIB gp120 protein. This sequence is used in a method  
 CC resulting in the production of a vaccine against HIV which induces an  
 CC immune response to the V3 epitope of HIV. This method which comprises the  
 CC transplantation of an epitope of HIV at plural sites in the hypervariable  
 CC region of immunoglobulin, the preparation of the epitope molecule  
 CC histocompatibility antibody, and optionally chemically cross linking the  
 CC epitope. An epitope histocompatibility antibody is also described in the  
 CC specification which specifically responds to HIV, prepared by  
 CC transplantation of an epitope comprising a peptide obtained from at least  
 CC one V3 sequence of HIV. (Updated on 17-OCT-2003 to standardise OS field)  
 XX  
 SQ Sequence 15 AA;  
 Query Match 100.0%; Score 77; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGPAFTVIGK 15  
 |||||  
 Db 1 RIQPGGPAFTVIGK 15

RESULT 19

AAW76898  
 ID AAW76898 standard; peptide; 15 AA.  
 XX  
 AC AAW76898;  
 XX  
 DT 25-JAN-1999 (first entry)  
 XX  
 DE Fusion immunoglobulin heavy chain HIV gp120 T cell epitope #17.  
 XX  
 KW B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IgH;  
 KW human immune deficiency virus; HIV; tolerance; treatment; therapy;  
 KW prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;  
 KW microbial infection; autoimmune disease; antibody; apoptosis;  
 KW antiviral T cell immunity.  
 XX  
 OS Mus sp.  
 OS Homo sapiens.  
 XX  
 PN WO9836087-A1.  
 XX  
 PD 20-AUG-1998.  
 XX  
 PF 13-FEB-1998; 98WO-US002766.  
 XX  
 PR 13-FEB-1997; 97US-0040581P.  
 XX  
 XX (AMNA-) AMERICAN NAT RED CROSS.  
 PA  
 XX Scott D, Zambidis E;  
 PI  
 XX WPI; 1998-506315/43.  
 DR  
 XX New fusion immunoglobulin heavy chain including gp120 epitopes and  
 PT related complete antibodies - DNA, vectors and transformed cells, used to  
 PT induce tolerance to the epitopes for treatment of human immune deficiency  
 PT virus infection.  
 XX  
 PS Claim 11; Page 120; 154pp; English.  
 XX  
 CC This sequence is an epitope used in the construction of a novel fusion  
 CC immunoglobulin heavy chain (IgH) protein with a mammalian, especially  
 CC human, IgH chain fused in frame at its N-terminus to one or more human  
 CC immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or  
 CC transfectant cells are used to tolerate subjects to gp120 epitopes and to  
 CC maintain this tolerance, particularly for treatment of HIV infection.  
 CC optionally together with other therapeutic/prophylactic agents such as  
 CC vaccines, chemotherapeutic agents and immune response modifiers. Such  
 CC proteins can be used against other diseases where an immune response is  
 CC deleterious, e.g. microbial infection, tumours or autoimmune disease.  
 CC Induction of tolerance suppresses production of antibodies against gp120,  
 CC so prevents or inhibits 'bystander' apoptosis of uninfected T cells that  
 CC are bound to gp120 protein, maximising induction of protective antiviral  
 CC T cell immunity  
 XX  
 SQ Sequence 15 AA;  
 Query Match 100.0%; Score 77; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGPAFTVIGK 15  
 |||||  
 Db 1 RIQPGGPAFTVIGK 15

RESULT 20  
 AAW54929  
 ID AAW54929 standard; peptide; 15 AA.  
 XX  
 AC AAW54929;  
 XX  
 DT 25-SEP-1998 (first entry)  
 XX

DE HIV gp120 envelope protein, peptide 127, analogue 127g'.

KW Immunoadsorbent; immunoassay; HIV gp120; immunogen; antibody; Human.

OS Human immunodeficiency virus.

XX US5763160-A.

XX 09-JUN-1998.

XX 07-JUN-1995; 95US-00488252.

XX 12-FEB-1988; 88US-00155321.

XX 01-MAR-1991; 91US-00663262.

XX 09-JUL-1991; 91US-00726605.

XX 19-OCT-1994; 94US-00326676.

XX (UNBI-) UNITED BIOMEDICAL INC.

XX Wang CY;

XX WPI; 1998-347301/30.

XX HIV gp120 peptides - useful as immunoassay reagents or vaccine components.

XX Example 8; Column 21/22; 34pp; English.

XX Peptides AAW54903-W54941 can be used as an immunoadsorbent in an immunoassay for detecting antibodies to HIV gp120, or as an immunogen for eliciting antibodies to HIV in a mammal

XX SQ Sequence 15 AA;

Query Match 100.0%; Score 77; DB 2; Length 15;

Best Local Similarity 100.0%; Pred. No. 9e-05;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQRPGRFVTVIGK 15

Db 1 RIQRPGRFVTVIGK 15

RESULT 21

AA06896

ID AAY06896 standard; peptide; 15 AA.

XX AAY06896;

AC AAY06896;

XX 01-JUL-1999 (first entry)

DT Sequence of gp120IIB P18 peptide.

DE Fusion protein; vaccine; cytokine; immunoglobulin; autoimmune disease; infectious disease; inflammatory disease; neoplastic disease; cancer; immunologic disease; immune response; malaria; tuberculosis; hepatitis; AIDS; influenza; interleukin; IL-2; Ig.

XX Synthetic.

OS WO9916466-A2.

XX 08-APR-1999.

PD 29-SEP-1998; 98WO-US020321.

XX 29-SEP-1997; 97US-0060338P.

PR 12-DEC-1997; 97US-00990180.

XX (BETH-) BETH ISRAEL DEACONESS MEDICAL CENT.

PA Letvin NL, Barouch DH;

XX

DR WPI; 1999-254931/21.

XX New vaccine compositions for treating AIDS, malaria, tuberculosis, cancer or influenza.

PT Example 3; Page 22; 66pp; English.

XX The invention relates to vaccine compositions comprising a vaccine and a timed-release formulation of a cytokine or cytokine/immunoglobulin fusion protein or plasmid. The formulation or device releases the cytokine protein or plasmid at one or more temporal points subsequent to vaccine administration. The vaccines can be used for treating an autoimmune disease, an infectious disease, an inflammatory disease, a neoplastic disease, or an immunologic disease in an individual. The vaccines can be used to elicit immune responses against diseases such as AIDS, malaria, tuberculosis, hepatitis C, hepatitis B, cancer or influenza. The methods can provide for enhancement of one or more immunologic parameters such as an antibody response, a cellular proliferative response as well as cytotoxic T-lymphocyte levels. In addition the Ig can increase the circulating half life of the cytokine

XX SQ Sequence 15 AA;

Query Match 100.0%; Score 77; DB 2; Length 15;

Best Local Similarity 100.0%; Pred. No. 9e-05;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQRPGRFVTVIGK 15

Db 1 RIQRPGRFVTVIGK 15

RESULT 22

AA024466

ID AAY24466 standard; peptide; 15 AA.

XX AAY24466;

AC AAY24466;

XX 23-SEP-1999 (first entry)

DT HIV peptide R15K-1.

DE Hepatitis B virus; HBV; X protein; cytotoxic T lymphocyte; liposome; CTL; antigen; immunity; liver cancer.

KW Human immunodeficiency virus 1.

OS Synthetic.

OS WO9936434-A1.

XX 22-JUL-1999.

PD 19-JAN-1998; 98WO-KR000010.

PF 19-JAN-1998; 98WO-KR000010.

XX (MOGA-) MOGAM BIOTECHNOLOGY RES INST.

XX Kim T, Lee K, Chang J, Cho S, Hwang Y, Choi M, Cheong H;

PI WPI; 1999-444387/37.

DR Hepatitis B virus protein X-derived peptide antigens used to stimulate cytotoxic T lymphocytes, useful for treatment of HBV-associated diseases, especially liver cancer.

PT Example 5; Page 14; 33pp; English.

XX The present invention describes peptide antigens AAY24459 to AAY24463 derived from the X protein of hepatitis B virus (HBV) which are recognized by cytotoxic T lymphocytes (CTL). The peptide antigens derived from HBV X protein are useful for inducing CTLs against the virus or inducing immunological tolerance to the virus. pH-sensitive liposomes

CC containing the peptide antigens are used to induce cellular immunity so  
CC that CTLs specific to the virus can be produced. This is useful for  
CC prevention and treatment of HBV-associated diseases, especially HBV-  
CC associated liver cancer. pH-sensitive liposomes permit the selective  
CC transportation of anti-cancer drugs. The present sequence represents a  
CC peptide used in an example from the present invention  
XX  
SQ Sequence 15 AA;  
Query Match 100.0%; Score 77; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 9e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RIQRGPGRAFTVIGK 15  
DB 1 RIQRGPGRAFTVIGK 15  
RESULT 23  
AAY25189  
ID AAY25189 standard; peptide; 15 AA.  
XX  
AC AAY25189;  
XX  
DT 03-SEP-1999 (first entry)  
XX  
DE HIV protein gp160 peptide fragment #1.  
XX  
KW Heat shock protein; HSP; complex; denatured protein matrix; antigen;  
KW vaccine; allergic disease; treatment; susceptibility; Th2; skin rash;  
KW allergic reaction; asthma; gp160.  
XX  
OS Human immunodeficiency virus.  
XX  
PN WO9929182-A1.  
XX  
PD 17-JUN-1999.  
XX  
PF 04-DEC-1998; 98WO-US025734.  
XX  
PR 05-DEC-1997; 97US-00985548.  
PR 05-DEC-1997; 97US-00986234.  
XX  
PA (UYNE-) UNIV NEW MEXICO STATE.  
XX  
PI Wallen ES, Moseley PL;  
XX  
DR WPI; 1999-394912/33.  
XX  
PT Synthesizing heat shock protein complexes using a denatured protein  
PT matrix.  
XX  
PS Example 1; Fig 1A; 33pp; English.  
XX  
CC This invention describes a novel method for synthesizing heat shock  
CC protein (HSP) complexes comprising adding a heat shock protein to a  
CC denatured protein matrix for binding, and adding a complexing solution  
CC comprising a peptide to elute a heat shock protein-peptide complex. A HSP  
CC -antigen complex is useful as a vaccine for treating an allergic disease  
CC (in a mammal, preferably a human) to reduce susceptibility of the Th2  
CC response, the complex comprising a HSP-antigenic peptide complex. The  
CC reaction is administered to prevent a mammal from having an allergic  
CC reaction to an allergic disease, or administered to a mammal having an  
CC allergic disease, to reduce the allergic reactions. Allergic diseases  
CC include asthma and skin rashes. Prior art methods or preventing/treating  
CC allergic diseases include antihistamines which treat only the symptoms,  
CC corticosteroids which have severe side effects and desensitization  
CC therapy which has limited uses. The new method also allows more  
CC flexibility of use of peptide-based vaccines, as prior art HSP-based  
CC vaccines require isolation from a portion of the tumour itself. This  
CC sequence represents a peptide fragment from the HIV gp160 protein which  
CC is used in the method of the invention  
XX

SQ Sequence 15 AA;  
Query Match 100.0%; Score 77; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 9e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RIQRGPGRAFTVIGK 15  
DB 1 RIQRGPGRAFTVIGK 15  
RESULT 24  
AAY25204  
ID AAY25204 standard; peptide; 15 AA.  
XX  
AC AAY25204;  
XX  
DT 03-SEP-1999 (first entry)  
XX  
DE HIV V3 peptide fragment #10.  
XX  
KW Heat shock protein; HSP; complex; denatured protein matrix; antigen;  
KW vaccine; allergic disease; treatment; susceptibility; Th2; skin rash;  
KW allergic reaction; asthma; V3 protein.  
XX  
OS Human immunodeficiency virus.  
XX  
PN WO9929182-A1.  
XX  
PD 17-JUN-1999.  
XX  
PF 04-DEC-1998; 98WO-US025734.  
XX  
PR 05-DEC-1997; 97US-00985548.  
PR 05-DEC-1997; 97US-00986234.  
XX  
PA (UYNE-) UNIV NEW MEXICO STATE.  
XX  
PI Wallen ES, Moseley PL;  
XX  
DR WPI; 1999-394912/33.  
XX  
PT Synthesizing heat shock protein complexes using a denatured protein  
PT matrix.  
XX  
PS Example 1; Fig 1B; 33pp; English.  
XX  
CC This invention describes a novel method for synthesizing heat shock  
CC protein (HSP) complexes comprising adding a heat shock protein to a  
CC denatured protein matrix for binding, and adding a complexing solution  
CC comprising a peptide to elute a heat shock protein-peptide complex. A HSP  
CC -antigen complex is useful as a vaccine for treating an allergic disease  
CC (in a mammal, preferably a human) to reduce susceptibility of the Th2  
CC response, the complex comprising a HSP-antigenic peptide complex. The  
CC complex is administered to prevent a mammal from having an allergic  
CC reaction to an allergic disease, or administered to a mammal having an  
CC allergic disease, to reduce the allergic reactions. Allergic diseases  
CC include asthma and skin rashes. Prior art methods or preventing/treating  
CC allergic diseases include antihistamines which treat only the symptoms,  
CC corticosteroids which have severe side effects and desensitization  
CC therapy which has limited uses. The new method also allows more  
CC flexibility of use of peptide-based vaccines, as prior art HSP-based  
CC vaccines require isolation from a portion of the tumour itself. This  
CC sequence represents a peptide fragment from the HIV V3 protein which is  
CC used in the method of the invention  
XX  
SQ Sequence 15 AA;  
Query Match 100.0%; Score 77; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 9e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RIQRGPGRAFTVIGK 15



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Db      ||||| 1 RIQPGGRAFTVIGK 15
RESULT 25
AAW05356
ID      AAW05356 standard; peptide; 15 AA.
XX
AC      AAY05356;
XX
DT      17-OCT-2003 (revised)
DT      29-JUN-1999 (first entry)
XX
DE      HIV-1 CLUVAC peptide, SEQ ID NO. 15.
XX
KW      HIV-1; CLUVAC; cluster peptide vaccine construct; cytotoxic T lymphocyte;
KW      protective mucosal CTL response; hepatitis A virus; papilloma virus;
KW      feline immunodeficiency virus; feline leukaemia virus; M. tuberculosis;
KW      Listeria monocytogenes; M. leprae; Giardia lamblia;
KW      immune response induction.
XX
OS      Human immunodeficiency virus 1.
XX
PN      WO9912563-A2.
XX
PD      18-MAR-1999.
XX
PF      11-SEP-1998; 98WO-US019028.
XX
PR      11-SEP-1997; 97US-0058523P.
PR      17-FEB-1998; 98US-0074894P.
XX
PA      (USSH ) US DEPT HEALTH & HUMAN SERVICE.
XX
PI      Berzofsky JA, Belyakov IM, Derby MA, Kelsall BL, Strober W;
XX
DR      WPI; 1999-243663/20.
XX
PT      Method for inducing a protective mucosal cytotoxic T lymphocyte immune
PT      response.
XX
PS      Example 3; Page 85; 86pp; English.
XX
CC      This sequence represents a HIV-1 cluster peptide vaccine conjugate
CC      (CLUVAC) sequence. The invention relates to a method for inducing a
CC      protective mucosal cytotoxic T lymphocyte (CTL) response in a mammalian
CC      subject, which comprises contacting a mucosal tissue of the subject with
CC      a composition comprising a purified soluble antigen. The method can
CC      induce a protective mucosal CTL response in a subject. The method can be
CC      used for protection against e.g. hepatitis A virus, papilloma virus,
CC      feline immunodeficiency virus, feline leukaemia virus, Listeria
CC      monocytogenes, M. tuberculosis, M. leprae, or Giardia lamblia. The method
CC      induces long-lasting protective mucosal immune responses. (Updated on 17-
CC      OCT-2003 to standardise OS field)
XX
SQ      Sequence 15 AA;
      Query Match      100.0%; Score 77; DB 2; Length 15;
      Best Local Similarity 100.0%; Pred. No. 9e-05;
      Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY      1 RIQPGGRAFTVIGK 15
      |||||
Db      1 RIQPGGRAFTVIGK 15

RESULT 26
AAW72821
ID      AAW72821 standard; peptide; 15 AA.
XX
AC      AAW72821;
XX
DT      17-OCT-2003 (revised)

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DT      13-JAN-1999 (first entry)
XX
DE      HIV-1 gp120 monoclonal antibody BAT123 residue 308 to 322.
XX
KW      HIV-1; gp120; epitope; monoclonal antibody; envelope; neutralise;
KW      inhibit; infection; T-cell; inhibit syncytium formation; AIDS.
XX
OS      Human immunodeficiency virus 1.
XX
PN      US5834599-A.
XX
PD      10-NOV-1998.
XX
PF      04-MAR-1993; 93US-00026276.
XX
PR      29-MAY-1987; 87US-00057445.
PR      24-DEC-1987; 87US-00137861.
PR      25-APR-1989; 89US-00343540.
PR      05-JUN-1992; 92US-00895197.
XX
PA      (TANO-) TANOX BIOSYSTEMS INC.
XX
PI      Sun BN, Fung SC, Kim YW, Sun CK, Chang NT, Chang T;
XX
DR      WPI; 1999-008810/01.
XX
PT      Antibody conjugate comprising monoclonal antibody - which binds to
PT      epitope within amino acid residue of gp120 which neutralises HIV-1
PT      conjugated with, e.g. cytotoxic agent.
XX
PS      Example 4; Col 25; 22pp; English.
XX
CC      The present invention describes an antibody conjugate comprising an
CC      antibody (Ab) which binds to an epitope within amino acid residue 308-322
CC      of gp120 and neutralises HIV-1, conjugated with a cytotoxic agent, an
CC      anti-viral agent or an agent which facilitates passage through the blood
CC      brain barrier. Also described is an antibody conjugate as above but where
CC      the Ab binds to an epitope within amino acid residue 298-312 of gp12
CC      which neutralises HIV-1. The present sequence represents an HIV-1 gp120
CC      monoclonal antibody BAT123 residue 308 to 322 from an example of the
CC      present invention. The Ab are monoclonal Ab which bind to the gp120
CC      protein on the envelope of HIV-1. They inhibit the infection of T-cells
CC      and also inhibit syncytium formation. The antibodies are group specific
CC      and neutralise different strains and isolates of HIV-1. The antibodies
CC      have a variety of uses, including the treatment and prevention of AIDS
CC      and AIDS related complex. They are especially used to kill infected T-
CC      cells. (Updated on 17-OCT-2003 to standardise OS field)
XX
SQ      Sequence 15 AA;
      Query Match      100.0%; Score 77; DB 2; Length 15;
      Best Local Similarity 100.0%; Pred. No. 9e-05;
      Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY      1 RIQPGGRAFTVIGK 15
      |||||
Db      1 RIQPGGRAFTVIGK 15

RESULT 27
AAW87620
ID      AAW87620 standard; peptide; 15 AA.
XX
AC      AAW87620;
XX
DT      17-OCT-2003 (revised)
DT      20-MAR-2003 (revised)
DT      03-MAR-1999 (first entry)
XX
DE      Epitope of HIV-1 gp120 protein which binds antibody BAT123.
XX
KW      Epitope; gp120 protein; monoclonal antibody; HIV-1; antibody BAT123;
KW      antibody BAT267; antibody BAT085; T cell infection inhibition;

```

KW syncytia formation; acquired immune deficiency syndrome; AIDS;  
KW AIDS-related complex; passive immunisation; antiviral; cytotoxic;  
KW viral load measurement; vaccine.  
XX  
OS Human immunodeficiency virus 1.  
XX  
PN US5854400-A.  
XX  
PD 29-DEC-1998.  
XX  
PF 22-SEP-1992; 92US-00950571.  
XX  
PR 29-MAY-1987; 87US-00057445.  
PR 24-DEC-1987; 87US-00137861.  
PR 26-SEP-1991; 91US-00767533.  
XX  
XX (TANO-) TANOX INC.  
XX  
XX Fung MSC, Sun BNC, Sun CRY, Chang NT, Chang TW;  
XX  
XX WPI; 1999-095002/08.  
DR  
XX Monoclonal antibodies directed against regions of gp120 of human immune  
PT deficiency virus-1 - are neutralising and able to inhibit infection of T  
PT cells and formation of syncytia, used for treatment, prevention or  
PT diagnosis of acquired immune deficiency syndrome.  
XX  
XX Claim 4; Col 8; 16pp; English.

XX The present sequence represents an epitope of the gp120 protein of human  
CC immune deficiency virus (HIV)-1. The sequence comprises amino acids 308  
CC to 322 of gp120. The specification describes monoclonal antibodies which  
CC bind to epitopes of the gp120 protein. Specifically, these antibodies are  
CC designated BA123, 267 and 085. Monoclonal antibodies neutralise HIV-1,  
CC inhibiting both infection of T cells and formation of syncytia, so are  
CC used to treat acquired immune deficiency syndrome (AIDS) and AIDS-related  
CC complex, by passive immunisation, as carriers of cytotoxic or antiviral  
CC agents, and in extracorporeal systems. They can also be used as  
CC immunoassay reagents (for diagnosis or measurement of viral load) and to  
CC screen for neutralising epitopes, potentially useful in vaccine  
CC development. (Updated on 20-MAR-2003 to correct PR field.) (Updated on 17  
CC -OCT-2003 to standardise OS field)  
XX  
SQ Sequence 15 AA;

Query Match 100.0%; Score 77; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 9e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RIQRGPGRAFTVIGK 15  
| | | | | | | | | | | | | | |  
DB 1 RIQRGPGRAFTVIGK 15

RESULT 28  
RAY04680  
ID RAY04680 standard; peptide; 15 AA.

AC RAY04680;  
XX  
DT 17-OCT-2003 (revised)  
DT 22-JUN-1999 (first entry)

XX HIV-1 gp120 amino acids 308-322.

XX gp120; HIV-1; monoclonal antibody; homology; antigen; breast; prostate;  
KW Gynecological; cancer; detection; diagnosis; cell membrane; chromatin.

XX Human immunodeficiency virus 1.  
OS  
XX WO9909047-A1.  
PN  
XX 25-FEB-1999.

XX 29-JUL-1998; 98WO-US015580.  
XX  
XX 29-JUL-1997; 97US-00902087.  
PR  
XX (RAKO/) RAKOWICZ-SZULCZYNSKA E M.  
PA  
XX Rakowicz-Szulczynska EM;  
XX WPI; 1999-190148/16.  
DR  
XX Use of HIV-1 polypeptides - for developing products for the detection and  
PT treatment of breast, gynecological and prostate cancers.  
XX  
XX Disclosure; Page 39; 80pp; English.

XX This peptide corresponds to amino acids 308-322 from the gp120 protein of  
CC the human immunodeficiency virus type 1 (HIV-1). The peptide is used to  
CC generate the monoclonal antibody Mab 5023. The invention relates to the  
CC use of homology between HIV-1 antigens and breast, gynecological and  
CC prostate cancer antigens to develop agents for use in the detection and  
CC treatment of such cancers. The method especially uses an antibody which  
CC recognises the p160, p80, p45 and p24 cell membrane proteins and the p24  
CC chromatin protein. (Updated on 17-OCT-2003 to standardise OS field)  
XX  
SQ Sequence 15 AA;

Query Match 100.0%; Score 77; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. NO. 9e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RIQRGPGRAFTVIGK 15  
| | | | | | | | | | | | | | |  
DB 1 RIQRGPGRAFTVIGK 15

RESULT 29  
RAY83916  
ID AAY83916 standard; peptide; 15 AA.

XX AAY83916;

DT 12-SEP-2003 (revised)  
DT 05-JUL-2000 (first entry)

XX HIV-1 env T-cell epitope #1.

XX Immunogen; particulate composition; immune response; assessment;  
KW target skin site; skin immune reaction; HIV-1; immunocompetence;  
KW antibody; cell mediated immunity; antigen exposure; allergy.

XX Human immunodeficiency virus 1.

XX WO200014547-A1.

XX 16-MAR-2000.

XX 03-SEP-1999; 99WO-GB002915.

XX 04-SEP-1998; 98US-0099261P.

XX 10-JUN-1999; 99US-0139045P.

XX (POWD-) POWDERJECT RES LTD.

XX Sarphie DF, Roberts LK, Fuller DL;

XX WPI; 2000-257072/22.

XX Assessing an immune response against a selected agent in an individual  
PT comprises accelerating a particulate composition, containing an  
PT immunogenic compound from a selected agent, into the target skin site of  
PT the individual.

XX

PS Disclosure; Page 23; 41pp; English.

XX The invention relates to a method of using an immunogenic compound from a  
 CC selected agent in the manufacture of a particulate composition for  
 CC assessing an immune response against the selected agent in an individual.  
 CC The method comprises: (a) accelerating the particulate composition into a  
 CC target skin site in the individual; and (b) assessing the target site to  
 CC determine the presence or absence of a localized skin immune reaction,  
 CC where the presence of the immune reaction is indicative of an immune  
 CC response against the selected agent. Peptides AAY83916-Y83925 represent  
 CC examples of peptides that could be used if the method is used to detect  
 CC human immunodeficiency virus type 1 (HIV-1). The method is useful for  
 CC assessing immunocompetence, antibody and cell mediated immunity, antigen  
 CC exposure, or allergic conditions in an individual. (Updated on 12-SEP-  
 CC 2003 to standardise OS field)

XX Sequence 15 AA;

Query Match 100.0%; Score 77; DB 3; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGGPGRFVTIGK 15  
 Db 1 RIQGGPGRFVTIGK 15

RESULT 30  
 AAY66439  
 ID AAY66439 standard; peptide; 15 AA.  
 AC AAY66439;  
 DT 12-SEP-2003 (revised)  
 DT 22-FEB-2000 (first entry)  
 DE HLA-A2-binding HIV-1 GP120 CTL epitope #241.  
 XX HIV-1; MHC; major histocompatibility complex; Class I; HLA-A2;  
 KW human leukocyte antigen; CTL; cytotoxic T-cell; epitope; allele; binding;  
 KW conserved; genome; peptide; targeting; toxic; drug; antibody; antigen;  
 KW antiviral; molecular conjugate therapeutic; diagnosis; treatment;  
 KW pathogen; localisation; quantification; detection; infection;  
 KW drug resistance; immune response.  
 XX Human immunodeficiency virus 1.  
 XX WO9949893-A1.  
 PN 07-OCT-1999.  
 XX 31-MAR-1999; 99WO-US007111.  
 XX 31-MAR-1998; 98US-00052530.  
 XX (UYBO-) UNIV BOSTON.  
 PA Delisi C, Berzofsky J, Gulukota K, Vaccaro D, Weng Z, Zhang C;  
 XX WPI; 2000-038361/03.  
 DR Novel methods for designing molecular conjugate therapeutics which are  
 PT used for diagnosis, imaging and treatment against pathogens.  
 XX Example 3; Page 50; 62pp; English.

XX AAY66421-Y66453 are cytotoxic T-cell epitopes derived from conserved  
 CC portions of the HIV-1 genome that are presented by HLA-A2 MHC (major  
 CC histocompatibility complex) Class I molecules. The peptides are used to  
 CC construct targeting antigens comprising one or more peptides bound to  
 CC the corresponding MHC Class I molecule, which can be used to raise  
 CC antibodies. The antibody may then be used as a targeting vehicle to  
 CC deliver a potentially toxic drug to its target site of action, rather

CC than administering it systemically, which may result in adverse side  
 CC effects. The invention relates to improved methods for the design of  
 CC molecular conjugate therapeutics for the diagnosis and treatment of  
 CC infections caused by pathogens with a high mutation rate (such as HIV-1).  
 CC This method involves identifying conserved peptide-encoding regions among  
 CC the genomes of multiple variants of a pathogen, identifying the Class I  
 CC MHC molecules which occur with greatest frequency in a population of the  
 CC interest (e.g., human sub-populations), and determining which of the  
 CC peptides bind to the Class I MHC molecules. The MHC-binding peptides and  
 CC the corresponding Class I MHC molecules are selected and used to  
 CC construct targeting antigens, which are in turn used to produce  
 CC targeting antibodies. The methods may be used in localisation,  
 CC quantification and in situ detection of specific peptide-MHC Class I  
 CC complexes and also to detect and treat viral infection. The methods of  
 CC the invention mitigate against the development of viral resistance to  
 CC drugs and to the immune response, as well as providing a solution for  
 CC targeting toxic compounds to destroy viruses sequestered in sites not  
 CC accessible to T cells. In addition, the methods eliminate the virus, 12-  
 CC whereas current therapies only arrest viral replication. (Updated on 12-  
 CC SEP-2003 to standardise OS field)

XX Sequence 15 AA;

Query Match 100.0%; Score 77; DB 3; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGGPGRFVTIGK 15  
 Db 1 RIQGGPGRFVTIGK 15

RESULT 31  
 AAY66455  
 ID AAY66455 standard; peptide; 15 AA.  
 AC AAY66455;  
 XX 12-SEP-2003 (revised)  
 DT 22-FEB-2000 (first entry)  
 XX HLA-A3-binding HIV-1 GP120 CTL epitope #257.  
 DE HIV-1; MHC; major histocompatibility complex; Class I; Caucasoid; HLA;  
 KW human leukocyte antigen; CTL; cytotoxic T-cell; Caucasian; epitope;  
 KW allele; binding; conserved; genome; peptide; targeting; toxic; drug;  
 KW antibody; antigen; antiviral; molecular conjugate therapeutic; diagnosis;  
 KW treatment; pathogen; localisation; quantification; detection; infection;  
 KW drug resistance; immune response.  
 XX Human immunodeficiency virus 1.  
 XX WO9949893-A1.  
 PN 07-OCT-1999.  
 XX 31-MAR-1999; 99WO-US007111.  
 XX 31-MAR-1998; 98US-00052530.  
 XX (UYBO-) UNIV BOSTON.  
 PA Delisi C, Berzofsky J, Gulukota K, Vaccaro D, Weng Z, Zhang C;  
 XX WPI; 2000-038361/03.  
 DR Novel methods for designing molecular conjugate therapeutics which are  
 PT used for diagnosis, imaging and treatment against pathogens.  
 XX Example 3; Page 51; 62pp; English.

XX AAY66454-Y66458 are cytotoxic T-cell epitopes derived from conserved  
 CC portions of the HIV-1 genome that are presented by MHC (major

CC histocompatibility complex) Class I alleles found with high frequency  
CC among Caucasoids in the USA. The peptides are used to construct  
CC targeting antigens comprising one or more peptides bound to the  
CC corresponding MHC Class I molecule, which can be used to raise  
CC antibodies. The antibody may then be used as a targeting vehicle to  
CC deliver a potentially toxic drug to its target site of action, rather  
CC than administering it systemically, which may result in adverse side  
CC effects. The invention relates to improved methods for the design of  
CC molecular conjugate therapeutics for the diagnosis and treatment of  
CC infections caused by pathogens with a high mutation rate (such as HIV-1).  
CC This method involves identifying conserved peptide-encoding regions among  
CC the genomes of multiple variants of a pathogen, identifying the Class I  
CC MHC molecules which occur with greatest frequency in a population of  
CC interest (e.g., human sub-populations), and determining which of the  
CC peptides bind to the Class I MHC molecules. The MHC-binding peptides and  
CC the corresponding Class I MHC molecules are selected and used to  
CC construct targeting antigens, which are in turn used to produce  
CC targeting antibodies. The methods may be used in localisation,  
CC quantification and in situ detection of specific peptide-MHC Class I  
CC complexes and also to detect and treat viral infection. The methods of  
CC the invention mitigate against the development of viral resistance to  
CC drugs and to the immune response, as well as providing a solution for  
CC targeting toxic compounds to destroy viruses sequestered in sites not  
CC accessible to T cells. In addition, the methods eliminate the virus,  
CC whereas current therapies only arrest viral replication. (Updated on 12-  
CC SEP-2003 to standardise OS field)

XX Sequence 15 AA;

Query Match 100.0%; Score 77; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 9e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15  
| | | | | | | | | | | | | | |  
DB 1 RIQRGPGRAFTVIGK 15

RESULT 32

AA185591  
ID AAY85591 standard; peptide; 15 AA.

XX AAY85591;

XX 12-SEP-2003 (revised)

DT 01-FEB-2001 (first entry)

XX HIV related peptide 13.

XX Immunogenic particle; human immunodeficiency virus; HIV; cytostatic;  
KW antiarthritic; antiinflammatory; cell-mediated immune response; cancer;  
KW rheumatoid arthritis; inflammatory disorder; viral infection.

XX Human immunodeficiency virus 1.

OS WO200057919-A2.

XX 05-OCT-2000.

XX 23-MAR-2000; 2000WO-CA000319.

XX 25-MAR-1999; 99US-00276057.

XX (SAPI-) SAPIENTIA THERAPEUTICS LTD.  
PA (AGEN-) AGENE RES INST CO LTD.

XX Sugimoto M, Arella M, Furuichi Y;

XX WPI; 2000-664891/64.

XX Lipid based artificial particles useful for inducing a cell mediated  
PT immune response in a subject having cancer, comprises a lipid based  
PT matrix, glycolipids and peptide-lipid conjugates embedded in the matrix.

XX Claim 10; Page 34; 39pp; English.

XX This invention relates to artificial immunogenic particles comprising  
XX glycolipids having a lipidic and a saccharide portion and peptide-lipid  
CC conjugates having a lipidic and a peptide portion embedded into a lipid  
CC based matrix. The peptide portion of the particle may be of viral origin.  
CC Peptides AAY85579-Y85591 are human immunodeficiency virus (HIV) related  
CC peptides which can be used as the peptide portion in an immunogenic  
CC particle of the invention. The particles have cytostatic, antiarthritic  
CC and antiinflammatory activity. The immunogenic particles are used for  
CC inducing a cell-mediated immune response in a host directed towards the  
CC peptide portion of the peptide-lipid conjugate. This means that the  
CC particles may be used to treat diseases such as cancer, rheumatoid  
CC arthritis, inflammatory disorders or viral infections such as HIV.  
CC (Updated on 12-SEP-2003 to standardise OS field)

XX Sequence 15 AA;

Query Match 100.0%; Score 77; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 9e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15  
| | | | | | | | | | | | | | |  
DB 1 RIQRGPGRAFTVIGK 15

RESULT 33

AA15875

ID AAB15875 standard; peptide; 15 AA.

XX AAB15875;

XX 17-JAN-2001 (first entry)

XX Human chemokine derived peptide #27.

XX Macrophage recruitment; chemokine derivative; MCP-1; osteoporosis;  
KW monocyte chemoattractant protein-1; inflammation; atherosclerosis; HIV;  
KW AIDS; stroke; psoriasis; autoimmune disease; hypertension; endotoxaemia;  
KW basophil-mediated disease; myocardial infarction; acute ischaemia;  
KW rheumatoid arthritis; contraception.

XX Synthetic.

OS WO200042071-A2.

XX 20-JUL-2000.

XX 12-JAN-2000; 2000WO-US000821.

XX 12-JAN-1999; 99US-00229071.

PR 17-MAR-1999; 99US-00271192.

PR 01-DEC-1999; 99US-00452406.

XX (NEOR-) NEORX CORP.

XX Grainger DJ, Tatalick LM;

XX WPI; 2000-499101/44.

XX New peptide 3, amide and heterocyclic compounds and saccharide conjugates  
PT used for inhibiting chemokine induced activity and for treating e.g.  
PT stroke, vascular diseases, autoimmune diseases and tumor growth.

XX Disclosure; Fig 18; 387pp; English.

XX The present invention concerns the identification of a number of  
CC chemokines which can be used to produce derivatives, agonists and  
CC antagonists which are then useful in disease treatment. The chemokines  
CC include sequences AAB15785-B15794, AAB15803-B15813 and AAB15831-B15848.  
CC These chemokine derivatives can be used to treat diseases such as

CC autoimmune diseases, atherosclerosis, osteoporosis, HIV infection and  
CC AIDS, psoriasis, inflammatory diseases, hypertension, basophil-mediated  
CC diseases, endotoxaemia, myocardial infarction, acute ischaemia and  
CC rheumatoid arthritis, and can be used to prevent strokes and as  
CC contraceptives. The coding sequences for the chemokines can be used in  
CC gene therapy for the same diseases, as well as in the production of  
CC animal models  
XX  
SQ Sequence 15 AA;  
Query Match 100.0%; Score 77; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 9e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy' 1 RIQRPGRGFAVTIGK 15  
Db 1 RIQRPGRGFAVTIGK 15  
RESULT 34  
AAB92345  
ID AAB92345 standard; peptide; 15 AA.  
XX  
AC AAB92345;  
XX  
DT 22-JUN-2001 (first entry)  
XX  
DE Virus related peptide SEQ ID NO:1521.  
XX  
KW Protection; endogenous therapeutic peptide; peptidase; conjugation;  
KW blood component; modification; succinimidyl; maleimido group; amino;  
KW hydroxyl; thiol; hormone; growth factor; neurotransmitter.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FN WO200069900-A2.  
XX  
PD 23-NOV-2000.  
XX  
PF 17-MAY-2000; 2000WO-US013576.  
XX  
PR 17-MAY-1999; 99US-0134406P.  
PR 10-SEP-1999; 99US-0153406P.  
PR 15-OCT-1999; 99US-0159783P.  
XX  
PA (CONJ-) CONJUCHEM INC.  
XX  
PI Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudeau K;  
XX  
DR WPI; 2001-112059/12.  
XX  
XX  
PT Modifying and attaching therapeutic peptides to albumin prevents  
PT peptidase degradation, useful for increasing length of in vivo activity.  
XX  
PS Disclosure; Page 702; 733pp; English.  
XX  
CC The present invention describes a modified therapeutic peptide (I)  
CC comprising a therapeutically active amino acid region (III) and a  
CC reactive group (II) (e.g. succinimidyl and maleimido groups) attached to  
CC a less therapeutically active amino acid region (IV), which covalently  
CC bonds with amino/hydroxyl/thiol groups on blood components to form a  
CC peptidease stabilised therapeutic peptide composed of 3-50 amino acids.  
CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth  
CC factors and neurotransmitters, to protect them from peptidase activity in  
CC vivo for the treatment of various disorders. Endogenous therapeutic  
CC peptides are not suitable as drug candidates as they require frequent  
CC administration due to rapid degradation by peptidases in the body.  
CC Modifying and attaching therapeutic peptides to albumin prevents or  
CC reduces the action of peptidases to increase length of activity (half  
CC life) and specificity as bonding to large molecules decreases  
CC intracellular uptake and interference with physiological processes.  
CC AAB90829 to AAB92441 represent peptides which can be used in the

CC exemplification of the present invention  
SQ Sequence 15 AA;  
Query Match 100.0%; Score 77; DB 4; Length 15;  
Best Local Similarity 100.0%; Pred. No. 9e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 RIQRPGRGFAVTIGK 15  
Db 1 RIQRPGRGFAVTIGK 15  
RESULT 35  
AAB92348  
ID AAB92348 standard; peptide; 15 AA.  
XX  
AC AAB92348;  
XX  
DT 22-JUN-2001 (first entry)  
XX  
DE Virus related peptide SEQ ID NO:1524.  
XX  
KW Protection; endogenous therapeutic peptide; peptidase; conjugation;  
KW blood component; modification; succinimidyl; maleimido group; amino;  
KW hydroxyl; thiol; hormone; growth factor; neurotransmitter.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FN WO200069900-A2.  
XX  
PD 23-NOV-2000.  
XX  
PF 17-MAY-2000; 2000WO-US013576.  
XX  
PR 17-MAY-1999; 99US-0134406P.  
PR 10-SEP-1999; 99US-0153406P.  
PR 15-OCT-1999; 99US-0159783P.  
XX  
PA (CONJ-) CONJUCHEM INC.  
XX  
PI Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudeau K;  
XX  
DR WPI; 2001-112059/12.  
XX  
PT Modifying and attaching therapeutic peptides to albumin prevents  
PT peptidase degradation, useful for increasing length of in vivo activity.  
XX  
PS Disclosure; Page 703; 733pp; English.  
XX  
CC The present invention describes a modified therapeutic peptide (I)  
CC comprising a therapeutically active amino acid region (III) and a  
CC reactive group (II) (e.g. succinimidyl and maleimido groups) attached to  
CC a less therapeutically active amino acid region (IV), which covalently  
CC bonds with amino/hydroxyl/thiol groups on blood components to form a  
CC peptidease stabilised therapeutic peptide composed of 3-50 amino acids.  
CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth  
CC factors and neurotransmitters, to protect them from peptidase activity in  
CC vivo for the treatment of various disorders. Endogenous therapeutic  
CC peptides are not suitable as drug candidates as they require frequent  
CC administration due to rapid degradation by peptidases in the body.  
CC Modifying and attaching therapeutic peptides to albumin prevents or  
CC reduces the action of peptidases to increase length of activity (half  
CC life) and specificity as bonding to large molecules decreases  
CC intracellular uptake and interference with physiological processes.  
CC AAB90829 to AAB92441 represent peptides which can be used in the  
CC exemplification of the present invention  
SQ Sequence 15 AA;  
Query Match 100.0%; Score 77; DB 4; Length 15;  
Best Local Similarity 100.0%; Pred. No. 9e-05;

```
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGGGFAFTVIGK 15
   |||||
Db 1 RIQGGGFAFTVIGK 15

RESULT 36
AAB68601
ID AAB68601 standard; peptide; 15 AA.
XX
AC AAB68601;
XX
XX 11-SEP-2003 (revised)
DT 25-APR-2001 (first entry)
XX
DE HIV gp120 V3 loop peptide #1.
XX
XX HIV gp120 V3 loop; liposome composition; HIV infection.
KW
XX Human immunodeficiency virus 1.
OS
XX US6180134-B1.
PN
XX 30-JAN-2001.
PD
XX 07-JUN-1995; 95US-00480332.
PF
XX 23-MAR-1993; 93US-00035443.
PR 29-SEP-1994; 94US-00316436.
XX
XX (SEQU-) SEQUUS PHARM INC.
PA
PI Zalipsky S, Woodle MC, Martin FJ, Barenholz Y;
XX WPI; 2001-201897/20.
DR
XX
XX Liposome composition for use in treating septic shock comprises liposomes
PT having an outer surface layer of polyethylene glycol chains, and a
PT polypeptide or polysaccharide effector molecule.
XX
XX Disclosure; Fig 13; 32pp; English.
PS
XX The present invention relates to a liposome composition comprising
CC liposomes having an outer surface layer of polyethylene glycol chains,
CC each having a free distal end. A polypeptide or polysaccharide effector
CC molecule is covalently attached to a portion of the distal ends. The
CC effector interferes with specific binding of pathogen or cell in a
CC bloodstream to a target cell or cell matrix, and is rapidly removed by
CC renal clearance from the bloodstream when administered in free form. The
CC liposome composition may be used in treating a condition mediated by
CC binding a pathogen or cell in the bloodstream, to a target cell or cell
CC matrix. It can be used in treating septic shock, toxic shock, colonic
CC inflammation, leukaemic cell proliferation, or HIV infection. The present
CC sequence is a peptide of the V3 loop of HIV envelope protein gp120. This
CC peptide may be used in the composition of the present invention. By
CC binds to the CD4 receptor during HIV infection of lymphocytes. By
CC introducing the present peptide, the CD4 receptors are blocked, thereby
CC inhibiting HIV infection. (Updated on 11-SEP-2003 to standardise OS
CC field)
XX
SQ Sequence 15 AA;
Query Match 100.0%; Score 77; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 9e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGGGFAFTVIGK 15
   |||||
Db 1 RIQGGGFAFTVIGK 15

RESULT 37
AAB68601
ID AAB68601 standard; peptide; 15 AA.
XX
AC AAB68601;
XX
XX 11-SEP-2003 (revised)
DT 25-APR-2001 (first entry)
XX
DE HIV gp120 V3 loop peptide #1.
XX
XX HIV gp120 V3 loop; liposome composition; HIV infection.
KW
XX Human immunodeficiency virus 1.
OS
XX US6180134-B1.
PN
XX 30-JAN-2001.
PD
XX 07-JUN-1995; 95US-00480332.
PF
XX 23-MAR-1993; 93US-00035443.
PR 29-SEP-1994; 94US-00316436.
XX
XX (SEQU-) SEQUUS PHARM INC.
PA
PI Zalipsky S, Woodle MC, Martin FJ, Barenholz Y;
XX WPI; 2001-201897/20.
DR
XX
XX Liposome composition for use in treating septic shock comprises liposomes
PT having an outer surface layer of polyethylene glycol chains, and a
PT polypeptide or polysaccharide effector molecule.
XX
XX Disclosure; Fig 13; 32pp; English.
PS
XX The present invention relates to a liposome composition comprising
CC liposomes having an outer surface layer of polyethylene glycol chains,
CC each having a free distal end. A polypeptide or polysaccharide effector
CC molecule is covalently attached to a portion of the distal ends. The
CC effector interferes with specific binding of pathogen or cell in a
CC bloodstream to a target cell or cell matrix, and is rapidly removed by
CC renal clearance from the bloodstream when administered in free form. The
CC liposome composition may be used in treating a condition mediated by
CC binding a pathogen or cell in the bloodstream, to a target cell or cell
CC matrix. It can be used in treating septic shock, toxic shock, colonic
CC inflammation, leukaemic cell proliferation, or HIV infection. The present
CC sequence is a peptide of the V3 loop of HIV envelope protein gp120. This
CC peptide may be used in the composition of the present invention. By
CC binds to the CD4 receptor during HIV infection of lymphocytes. By
CC introducing the present peptide, the CD4 receptors are blocked, thereby
CC inhibiting HIV infection. (Updated on 11-SEP-2003 to standardise OS
CC field)
XX
SQ Sequence 15 AA;
Query Match 100.0%; Score 77; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 9e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
AAE15743
ID AAE15743 standard; peptide; 15 AA.
XX
AC AAE15743;
XX
XX 26-MAR-2002 (first entry)
DT
XX Human immunodeficiency virus (HIV) p18 peptide.
DE
XX HIV; human immunodeficiency virus; cytostatic; immunosuppressive; p18;
KW virucide; antibacterial; fungicide; protozoacide; antirheumatic; vaccine;
KW antiinflammatory; antiarthritic; neuroprotective; rheumatoid arthritis;
KW cancer; multiple sclerosis; immune response; vasotropic; gene therapy;
KW autoimmune disease; vasculitis.
XX
OS Human immunodeficiency virus.
XX WO200176643-A1.
FN
XX 18-OCT-2001.
PD
XX 06-APR-2001; 2001WO-US011372.
PF
XX 07-APR-2000; 2000US-0195680P.
PR
XX (BAYU) BAYLOR COLLEGE MEDICINE.
PA
XX Orson FM, Kinsey BM, Bhogal BS;
PI
XX WPI; 2002-066308/09.
DR
XX
XX Composition for oral delivery of vaccines, comprises expression vector
PT containing antigenic genomic sequence, bound to aggregated protein-
PT polycationic polymer conjugate or suspension.
XX
XX Example 10; Page 30; 145pp; English.
PS
XX The invention relates to a composition comprising an expression vector
CC bound to an aggregated protein-polycationic polymer conjugate or
CC suspension. The expression vector contains a promoter polynucleotide
CC sequence operatively linked to a polynucleotide sequence encoding an
CC antigen which is a fragment of a gene or genome associated with an
CC infectious disease, cancer and autoimmune disease such as rheumatoid
CC arthritis, vasculitis, and multiple sclerosis, pathogenic genomes
CC consisting of bacterium, fungus, protozoa and virus such as human
CC immunodeficiency virus (HIV), herpes simplex virus (HSV), hepatitis C
CC virus (HCV), influenza and respiratory syncytial virus (RSV), and
CC optionally comprising a nucleotide sequence encoding a cytokine (or a
CC cytokine expression vector), is useful for inducing an immune response
CC (systemic and/or mucosal) in an organism. The cytokine expression vector
CC contains a sequence for granulocyte macrophage-colony stimulating factor
CC (GM-CSF) or interleukin-12 (IL-12). The polynucleotide sequences encoding
CC the antigen and the cytokine are under transcriptional control of same or
CC different promoter polynucleotide sequences. The expression vector, as a
CC DNA vaccine is useful for treating a condition in an organism. The
CC present sequence is human immunodeficiency virus (HIV) p18 peptide,
CC related to the invention
XX
SQ Sequence 15 AA;
Query Match 100.0%; Score 77; DB 5; Length 15;
Best Local Similarity 100.0%; Pred. No. 9e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGGGFAFTVIGK 15
   |||||
Db 1 RIQGGGFAFTVIGK 15

RESULT 38
AAU96031
ID AAU96031 standard; protein; 15 AA.
XX
```

```

AC AAU96031;
XX
XX 29-AUG-2003 (revised)
XX 02-JUL-2002 (first entry)
XX
XX HIV epitope, HIV-1 gp120 H-2Dd,help, peptide sequence.
XX
XX Vaccine; non-replicating; viral tubule; immunogen; antibody; BTv;
XX Bluetongue virus; foot and mouth disease virus; FMDV; influenza virus;
XX human immunodeficiency virus; HIV; protective immunity; epitope; TUB;
XX virus-derived tubule; anti-HIV; virucide.
XX
XX Human immunodeficiency virus 1.
XX
XX WO200226254-A2.
XX
XX 04-APR-2002.
XX
XX 27-SEP-2001; 2001WO-US030464.
XX
XX 27-SEP-2000; 2000US-0235614P.
XX
XX (UABR-) UAB RES FOUND.
XX
XX Roy P;
XX
XX WPI; 2002-339987/37.
XX
XX A vaccine, for inducing an antiviral immune response, comprises a non-
XX replicating vaccine delivery vehicle (which comprises a non-infectious
XX recombinant viral tubule) carrying one or more immunogens.
XX
XX Claim 8; Page 39; 65pp; English.
XX
XX The present invention relates to a new vaccine comprising a non-
XX replicating vaccine delivery vehicle (which comprises a non-infectious
XX recombinant viral tubule) carrying one or more immunogens. The invention
XX is useful for inducing an immune response, preferably anti-viral, in a
XX subject. The administration of the vaccine is preferably followed by
XX administering one or more virus like particles carrying an immunogen. It
XX is also useful for administering to a patient for generating antibodies
XX specific for one or more immunogens, such as Bluetongue virus (BTV), foot
XX and mouth disease virus (FMDV), influenza virus and human
XX immunodeficiency virus (HIV). The invention provides an effective means
XX of delivering multiple peptide components representing viral/tumour
XX antigenic groups to elicit protective immunity, which has not previously
XX been possible. The present amino acid sequence represents one of a
XX collection (AAU96022-AAU96045) of HIV epitopes that were used in the
XX methods of the invention as immunogens. These epitopes were used to
XX construct chimeric NS1-TUBs (virus-derived tubules) which show
XX immunogenicity. (Updated on 29-AUG-2003 to standardise OS field)
XX
XX Sequence 15 AA;
XX
XX Query Match 100.0%; Score 77; DB 5; Length 15;
XX Best Local Similarity 100.0%; Pred. No. 9e-05;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 RIQRGPGRAFTVIGK 15
XX |||||
XX Db 1 RIQRGPGRAFTVIGK 15
XX
XX RESULT 39
XX AAU97690
XX ID AAU97690 standard; peptide; 15 AA.
XX
XX AC AAU97690;
XX
XX 29-AUG-2003 (revised)
XX 13-AUG-2002 (first entry)
XX
XX HIV CTL epitope peptide sequence.

```

```

XX
XX Adjuvant; acid-fast bacterium; acquired immunodeficiency syndrome;
XX DNA vaccine; AIDS; hepatitis C virus; alpha-antigen gene; CTL;
XX Mycobacterium kansasii; antigenic; immunogenic; epitope;
XX human immunodeficiency virus; HIV.
XX
XX Human immunodeficiency virus 1.
XX
XX JP2002114708-A.
XX
XX 16-APR-2002.
XX
XX 06-OCT-2000; 2000JP-00307674.
XX
XX 06-OCT-2000; 2000JP-00307674.
XX
XX (PRIM-) PRIMUNE CORP YG.
XX
XX WPI; 2002-448884/48.
XX
XX An adjuvant of a DNA vaccine composed of alpha-antigen genes derived from
XX acid-fast bacterium.
XX
XX Example 1; Page 7; 12pp; Japanese.
XX
XX The present invention relates to a new adjuvant of a gene derived from
XX acid-fast bacterium for a DNA vaccine against AIDS (acquired
XX immunodeficiency syndrome) and hepatitis C virus. The invention is
XX composed of an effective component of alpha-antigen gene derived from
XX acid-fast bacterium for DNA vaccine, particularly encoding for an alpha-
XX antigen, particularly derived from Mycobacterium kansasii or its variant
XX which has the same function, with an effective ingredient of an
XX expression vector of the gene, used as an adjuvant, particularly a
XX chimera DNA vaccine with a gene encoding for an antigenic peptide
XX inserted, used for a DNA vaccine using a gene encoding for an immunogenic
XX peptide derived from AIDS or hepatitis C virus. The adjuvant is useful
XX for the treatment of AIDS or hepatitis C. The adjuvant enhances the
XX immune inductive effect of the DNA vaccine. The present amino acid
XX sequence represents the HIV (human immunodeficiency virus) CTL epitope
XX peptide of the invention. (Updated on 29-AUG-2003 to standardise OS
XX field)
XX
XX Sequence 15 AA;
XX
XX Query Match 100.0%; Score 77; DB 5; Length 15;
XX Best Local Similarity 100.0%; Pred. No. 9e-05;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 RIQRGPGRAFTVIGK 15
XX |||||
XX Db 1 RIQRGPGRAFTVIGK 15
XX
XX RESULT 40
XX ABG68654
XX ID ABG68654 standard; peptide; 15 AA.
XX
XX AC ABG68654;
XX
XX 29-AUG-2003 (revised)
XX 07-OCT-2002 (first entry)
XX
XX HIV-1 P18IIB peptide antigen.
XX
XX Eliciting an immune response; peptide antigen; T-cell epitope;
XX tumour antigen; viral antigen; non-viral vector; HIV-1;
XX T-cell co-stimulatory molecule; human immunodeficiency virus;
XX immunostimulant.
XX
XX Human immunodeficiency virus 1; (IIB isolate).
XX
XX US200204948-A1.
XX

```

PD 18-APR-2002.  
 XX  
 PF 14-MAR-2001; 2001US-00810310.  
 XX  
 PR 15-MAR-2000; 2000US-0189396P.  
 XX  
 PA (KHLE/) KHLEIF S.  
 PA (BERZ/) BERZOFSKY J.  
 XX  
 PI Khleif S, Berzofsky J;  
 XX WPI; 2002-507231/54.  
 DR  
 XX Administering a non-viral vector encoding a co-stimulatory molecule  
 PT alongside a peptide or protein T cell epitope, elicits increased response  
 PT to the antigen and is useful to enhance peptide and protein based  
 PT vaccines and treatments.  
 XX  
 PS Disclosure; Page 7; 39pp; English.  
 CC The present invention relates to a method for eliciting an immune  
 CC response in a subject. The method comprises administering a peptide or  
 CC protein antigen comprising T-cell epitope(s) (e.g. tumour antigen, viral  
 CC or non-viral antigen) coordinately with a non-viral vector comprising a  
 CC polynucleotide encoding a T-cell co-stimulatory molecule. Viral peptide  
 CC antigens may include human immunodeficiency virus (HIV) antigen,  
 CC hepatitis B virus (HBV), herpes simplex virus (HSV) or human papilloma  
 CC virus (HPV). The method is useful to elicit an immune response in a  
 CC subject, and to supplement and enhance peptide and protein based vaccines  
 CC and treatment methods. ABG68640-ABG68700 represent HIV-1 peptide antigens  
 CC useful in the method of the present invention. (Updated on 29-AUG-2003 to  
 CC standardise OS field)  
 XX Sequence 15 AA;  
 SQ  
 Query Match 100.0%; Score 77; DB 5; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQGGPGRFVTTGK 15  
 DB |||||  
 1 RIQGGPGRFVTTGK 15  
 RESULT 41  
 ID ABG68663  
 XX ABG68663 standard; peptide; 15 AA.  
 AC ABG68663;  
 XX  
 DT 29-AUG-2003 (revised)  
 DT 07-OCT-2002 (first entry)  
 XX  
 DE HIV-1 P18 based peptide antigen #1.  
 XX  
 KW Eliciting an immune response; peptide antigen; T-cell epitope;  
 KW tumour antigen; viral antigen; non-viral vector; HIV-1;  
 KW T-cell co-stimulatory molecule; human immunodeficiency virus;  
 KW immunostimulant.  
 XX  
 OS Human immunodeficiency virus 1; (IIB isolate).  
 XX  
 PN US2002044948-A1.  
 XX  
 PD 18-APR-2002.  
 XX  
 PF 14-MAR-2001; 2001US-00810310.  
 XX  
 PR 15-MAR-2000; 2000US-0189396P.  
 XX  
 PA (KHLE/) KHLEIF S.  
 PA (BERZ/) BERZOFSKY J.  
 XX

PI Khleif S, Berzofsky J;  
 XX WPI; 2002-507231/54.  
 XX  
 PT Administering a non-viral vector encoding a co-stimulatory molecule  
 PT alongside a peptide or protein T cell epitope, elicits increased response  
 PT to the antigen and is useful to enhance peptide and protein based  
 PT vaccines and treatments.  
 XX  
 PS Disclosure; Page 7; 39pp; English.  
 CC The present invention relates to a method for eliciting an immune  
 CC response in a subject. The method comprises administering a peptide or  
 CC protein antigen comprising T-cell epitope(s) (e.g. tumour antigen, viral  
 CC or non-viral antigen) coordinately with a non-viral vector comprising a  
 CC polynucleotide encoding a T-cell co-stimulatory molecule. Viral peptide  
 CC antigens may include human immunodeficiency virus (HIV) antigen,  
 CC hepatitis B virus (HBV), herpes simplex virus (HSV) or human papilloma  
 CC virus (HPV). The method is useful to elicit an immune response in a  
 CC subject, and to supplement and enhance peptide and protein based vaccines  
 CC and treatment methods. ABG68640-ABG68700 represent HIV-1 peptide antigens  
 CC useful in the method of the present invention. (Updated on 29-AUG-2003 to  
 CC standardise OS field)  
 XX Sequence 15 AA;  
 SQ  
 Query Match 100.0%; Score 77; DB 5; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQGGPGRFVTTGK 15  
 DB |||||  
 1 RIQGGPGRFVTTGK 15  
 RESULT 42  
 ID AAE35161  
 XX AAE35161 standard; peptide; 15 AA.  
 AC AAE35161;  
 XX  
 DT 28-MAY-2003 (first entry)  
 XX  
 DE HIV CTL epitope #6.  
 XX  
 KW Cytolytic T lymphocyte; epitope; vaccine; prophylaxis; HIV infection;  
 KW human immunodeficiency virus; acquired immune deficiency syndrome; CTL;  
 KW gene therapy; AIDS.  
 XX  
 OS Human immunodeficiency virus.  
 XX  
 PN WO200294313-A2.  
 XX  
 PD 28-NOV-2002.  
 XX  
 PF 20-MAY-2002; 2002WO-GB002336.  
 XX  
 PR 18-MAY-2001; 2001US-0291654P.  
 PR 18-MAY-2001; 2001US-0291655P.  
 XX  
 PA (POWD-) POWDERJECT VACCINES INC.  
 PA (POWD-) POWDERJECT RES LTD.  
 XX  
 PI Fuller D, Fuller J, Haynes J, Shipley T;  
 XX WPI; 2003-148439/14.  
 DR  
 XX Recombinant nucleic acid for the treatment and prophylaxis of acquired  
 PT immunodeficiency syndrome, comprises a nucleic acid sequence encoding an  
 PT antigen containing two or more cytolytic T lymphocyte (CTL) epitopes or  
 PT its analogs.  
 XX  
 PS Claim 1; Col 78; 42pp; English.



XX The invention relates to a recombinant nucleic acid comprising a nucleic  
CC acid sequence encoding an antigen containing two or more cytolytic T  
CC lymphocyte (CTL) epitopes or its analogues. Sequences of the invention  
CC are used in vaccines and are useful for the treatment and prophylaxis of  
CC human immunodeficiency virus (HIV) infection, particularly acquired  
CC immune deficiency syndrome (AIDS). The invention is also useful in gene  
CC therapy. The present sequence is HIV CTL epitope. This sequence is used  
CC in the exemplification of the invention  
XX  
SQ Sequence 15 AA;  
  
Query Match 100.0%; Score 77; DB 6; Length 15;  
Best Local Similarity 100.0%; Pred. No. 9e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 1 RIQRGPGRAFTVIGK 15  
Db 1 RIQRGPGRAFTVIGK 15  
  
RESULT 43  
ADN14074  
ID ADN14074 standard; peptide; 15 AA.  
AC ADN14074;  
XX  
XX 17-JUN-2004 (first entry)  
DT  
XX HIV helper T cell epitope #41.  
DE  
XX HIV; antigen; epitope; T cell; MHC; major histocompatibility complex;  
KW CTL; cytotoxic T lymphocyte; HIV infection; cancer; tuberculosis; tumour;  
KW hepatitis; melanoma; breast cancer; Hodgkin lymphoma;  
KW nasopharyngeal carcinoma; vaccine; immune response; hyaluronic acid; HA;  
KW CD8+ T cell; CD4+ T cell; viral infection; bacterial infection;  
KW fungal infection; parasitic infection.  
XX  
OS Human immunodeficiency virus 1.  
XX  
XX US2003049253-A1.  
PN  
XX 13-MAR-2003.  
PD  
XX 05-FEB-2002; 2002US-00062710.  
PF  
XX 08-AUG-2001; 2001US-0310498P.  
PR  
XX (LIFQ/) LI F Q.  
PA (CHUY/) CHU Y.  
PA (QIUJ/) QIU J.  
XX  
XX Li FQ, Chu Y, Qiu J;  
PI  
XX WPI; 2003-540464/51.  
DR  
XX Modulating an immune system response to an antigen in a mammal, comprises  
PT administering a particle-free therapeutic comprising a hyaluronic acid  
PT polymer analogue covalently linked to a peptide that comprises a T cell  
PT epitope.  
XX  
XX Disclosure; Page 12; 23pp; English.  
XX  
XX The invention relates to modulating an immune system response to an  
CC antigen in a mammal comprising administering to the mammal a particle-  
CC free therapeutic comprising a hyaluronic acid (HA) polymer analogue  
CC covalently linked to at least one peptide that comprises a T cell epitope  
CC recognised by a major histocompatibility complex molecule of the mammal.  
CC The T cell epitope comprises a sequence of at least about eight amino  
CC acids of the antigen. Also included are a method of improving major  
CC histocompatibility complex (MHC) presentation of a T cell epitope of an  
CC antigen in a mammal (comprising administering to the mammal the  
CC conjugate). The T cell epitope is recognised by a major

CC histocompatibility complex (MHC) Class I molecule and by a CD8+ T cell of  
CC the mammal, or an MHC Class II molecule and a CD4+ T cell of the mammal.  
CC The immune system response comprises a cytotoxic T lymphocyte, a CD4+T  
CC cell, or an antibody that recognises the antigen. The immune system  
CC response to the antigen is increased after administration of the  
CC conjugate, where the antigen is an antigen of a pathogenic agent or a  
CC tumour cell. The immune system response to the antigen is decreased after  
CC administration of the conjugate, where the antigen is an antigen of a  
CC tissue or organ transplanted to the mammal. The composition and methods  
CC are useful for modulating, i.e. enhancing or diminishing, an immune  
CC system response to an antigen in a mammal. The composition is also useful  
CC for improving major histocompatibility complex presentation of a T cell  
CC epitope of an antigen in a mammal. The polymeric hyaluronic acid  
CC conjugates are useful as peptide vaccines against an antigen, a  
CC pathogenic agent such as viral, bacterial, fungal or parasitic protein,  
CC or a tumour cell) in a mammal. The peptide vaccine compositions are  
CC useful for treating or preventing diseases associated with any of the  
CC antigens above e.g. HIV infection, cancer, tuberculosis, hepatitis,  
CC melanoma, breast cancer, Hodgkin's lymphoma and nasopharyngeal carcinoma.  
CC The peptide vaccine compositions of the present invention do not require  
CC additional adjuvants, but still induce a stronger cell-mediated response  
CC than peptide vaccines of the prior art. The present sequence is an HIV-1  
CC derived epitope suitable for the vaccine of the invention.  
XX  
SQ Sequence 15 AA;  
  
Query Match 100.0%; Score 77; DB 7; Length 15;  
Best Local Similarity 100.0%; Pred. No. 9e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 1 RIQRGPGRAFTVIGK 15  
Db 1 RIQRGPGRAFTVIGK 15  
  
RESULT 44  
ADR04041  
ID ADR04041 standard; peptide; 15 AA.  
XX  
XX ADR04041;  
XX  
XX 04-NOV-2004 (first entry)  
DT  
XX Immune response induction composition peptide adjuvant #2.  
DE  
XX vaccine; viricide; antibacterial; immunosuppressive; antiallergic;  
KW cytostatic; peptide adjuvant.  
XX  
XX Synthetic.  
OS  
XX WO2004067020-A1.  
PN  
XX 12-AUG-2004.  
PD  
XX 30-JAN-2004; 2004WO-KR000177.  
PF  
XX 30-JAN-2003; 2003KR-00006393.  
PR  
XX (UYPO-) UNIV POHANG SCI & TECHNOLOGY.  
PA (GENE-) GENEXINE CO LTD.  
XX  
XX Park K, Park S, Yang S, Lee C, Choi S, Ryu S, Kim Y, Sung Y;  
PI  
XX WPI; 2004-580853/56.  
DR  
XX New vaccine composition comprising a peptide adjuvant and a DNA vaccine  
PT encoding an immunogenic protein, useful for inducing immune responses  
PT against diseases e.g. HIV infection, autoimmune diseases, tuberculosis or  
PT allergies.  
XX  
XX Example 2; Page 21; 37pp; English.  
PS  
XX The present invention relates to a vaccine composition comprising a

CC peptide adjuvant and a DNA vaccine encoding an immunogenic protein. The  
 CC composition may also comprise a gene of the influenza virus, preferably  
 CC the neuraminidase gene. The vaccine composition is useful for inducing  
 CC immune responses against diseases comprising HIV infection, herpes  
 CC simplex virus (HSV) infection, influenza virus infection, hepatitis A or  
 CC B infection, papillomavirus infection, tuberculosis, tumour growth,  
 CC autoimmune diseases or allergies. The present sequence is a peptide  
 CC adjuvant useful in the composition of the invention.

XX Sequence 15 AA;

Query Match 100.0%; Score 77; DB 8; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRFAFTVIGK 15  
 |||||  
 DB 1 RIQGPGRFAFTVIGK 15

RESULT 45

AAR24939  
 ID AAR24939 standard; protein; 16 AA.

XX AAR24939;

XX 25-MAR-2003 (revised)  
 DT 09-DEC-1992 (first entry)  
 XX  
 XX HIV peptide ENV 312-327.

XX Lipopeptide; lipoprotein; vaccine; cytotoxic T-cell; lymphocyte; HIV;  
 KW human immunodeficiency virus; AIDS; cancer; tumour cells; CB1; CB2; CB3.

XX Synthetic.  
 XX EP491628-A2.

XX 24-JUN-1992.

XX 18-DEC-1991; 91EP-00403446.

XX 18-DEC-1990; 90FR-00015870.

XX (INSP ) INST PASTEUR LILLE.

PA (INRM ) INSERM INST NAT SANTE & RECH MED.

PA (INSP ) INST PASTEUR.

XX Boutillon C, Martinon F, Sergheraert C, Magne R, Gras-Masse H;

PI Gonnard E, Tartar A, Levy JP;

XX WPI; 1992-209776/26.

XX Lipopeptide(s) which stimulate cytotoxic T-cells - for treating HIV,  
 PT parasitic infections and cancer.

XX Example; Page 18; 32pp; French.

XX The sequence is that of peptide ENV 312-327 derived from the HIV, it is  
 CC made by standard methods of solid phase peptide synthesis. It is used as  
 CC part of lipoproteins CB1, CB2 and CB3 which comprise the peptide, and one  
 CC or more chains derived from 10-20C fatty acids and/ or modified steroid  
 CC groups, these being coupled to alpha or epsilon amino groups of the  
 CC peptide. The lipoproteins are useful in vaccines and acts by inducing  
 CC cytotoxic T lymphocytes against the HIV virus antigen from which the  
 CC peptide is derived. See also AAR24938 and AAR24940. (Updated on 25-MAR-  
 CC 2003 to correct PN field.)

XX Sequence 16 AA;

Query Match 100.0%; Score 77; DB 2; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 9.5e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRFAFTVIGK 15  
 |||||  
 DB 2 RIQGPGRFAFTVIGK 16

RESULT 46

AAW68326  
 ID AAW68326 standard; peptide; 16 AA.

XX AAW68326;

XX 25-MAR-2003 (revised)

DT 14-OCT-1998 (first entry)

XX MHC binding peptide ENV.312-327.

XX Antigen; major histocompatibility complex; MHC; lymphocyte; detection;  
 KW immobilisation; cytotoxic T-cell; tumour; leukaemia; lymphoma;  
 KW viral infection.

XX Synthetic.

OS Human immunodeficiency virus 1.

XX WO9744667-A2.

XX 27-NOV-1997.

XX 21-MAY-1997; 97WO-FR000892.

XX 21-MAY-1996; 96US-00651925.

XX (INSP ) INST PASTEUR.

PA (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.

XX Langladedemoyen P, Lone Y, Kourilsky P, Abastado J;

XX WPI; 1998-018653/02.

XX Detection, purification and elimination of antigen-specific lymphocytes -  
 PT for producing cytotoxic T cells for immuno-therapy of cancers and viral  
 PT infection.

XX Disclosure; Page 27; 222pp; French.

XX Peptides AAW68301-W68384 are examples of antigens (Ag) which can be  
 CC loaded onto recombinantly produced major histocompatibility complex (MHC)  
 CC molecules in a method of detecting antigen-specific lymphocytes. The MHC-  
 CC antigen complex is then immobilised on a solid support and a sample  
 CC containing cells recognising the MHC-Ag complex may be isolated. This  
 CC peptide is derived from amino acids 312-327 of the human immunodeficiency  
 CC virus type 1 (HIV-1) env protein. A similar method is used to isolate,  
 CC purify or eliminate Ag-specific T-cells or to produce Ag-specific  
 CC cytotoxic T-cells (CTC). The method is also used to detect and quantify  
 CC tumour-specific T-cells and to generate CTC for specific killing of  
 CC tumour cells (solid tumours, leukaemia or lymphoma) by injection into a  
 CC human or animal, but also for treating viral infections. (Updated on 25-  
 CC MAR-2003 to correct PI field.)

XX Sequence 16 AA;

Query Match 100.0%; Score 77; DB 2; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 9.5e-05;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRFAFTVIGK 15  
 |||||  
 DB 2 RIQGPGRFAFTVIGK 16

RESULT 47

AAV68203  
 ID AAV68203 standard; peptide; 16 AA.

```
XX AC AAY68203;
XX DT 12-SEP-2003 (revised)
XX DT 13-APR-2000 (first entry)
XX DE
XX DE Altered MHC determinant binding peptide SEQ ID NO:35.
XX KW MHC class I; major histocompatibility complex; microglobulin; antigen;
XX KW immune response; immunisation; AIDS; multiple sclerosis; toxic shock;
XX KW cancer; lupus erythematosus; snake bite; cytostatic; antiviral;
XX KW immunomodulatory; dermatological; immunosuppressive; antiinflammatory;
XX KW neuroprotective.
XX OS Human immunodeficiency virus 1.
XX OS US6011146-A.
XX PN
XX PD 04-JAN-2000.
XX PF 07-JUN-1995; 95US-00481985.
XX PR 15-NOV-1991; 91US-00792473.
XX PR 05-DEC-1991; 91US-00801818.
XX PA (INSP ) INST PASTEUR.
XX PA (INRM ) INST NAT SANTE & RECH MEDICALE.
XX PI Kourileky P, Mottez E, Abastado J;
XX PI WPI; 2000-125951/11.
XX DR
XX PT New recombinant DNA encoding covalently linked form of major
XX PT histocompatibility complex Class I determinant, used for immune system
XX PT stimulation, e.g. for treating cancer.
XX PS Disclosure; Col 11; 88pp; English.
XX CC
XX CC The present invention describes a recombinant DNA molecule (I) containing
XX CC a sequence (Ia) that encodes an altered MHC (major histocompatibility
XX CC complex ) Class I determinant (II) comprises a polypeptide with alpha1,
XX CC alpha2, alpha3 and beta2-microglobulin domains, in which alpha3 and beta2
XX CC are covalently linked, thorough C- and N-termini respectively, via a
XX CC nucleotide spacer sequence encoding a polypeptide. (II) includes an
XX CC antigen-binding site and when (II) and the antigen are associated they
XX CC are recognized by a mammalian T cell receptor (TCR). (I) are used to
XX CC produce (II) which are used to study functional interactions between the
XX CC various MHC domains. They can also be used to modulate (in vivo or in
XX CC vitro) the immune system by inducing an effector response (cytotoxicity,
XX CC antibody synthesis, phagocytosis) of immune system cells, typically for
XX CC treating, or immunising against; cancer, acquired immune deficiency
XX CC syndrome, lupus erythematosus, multiple sclerosis, toxic shock and snake
XX CC bite, but also for selective destruction of autoreactive cells,
XX CC diagnostically to assay T cell receptors and to raise specific antibodies
XX CC (useful for diagnosis, therapy, studying MHC-associated cellular
XX CC processes and for affinity purification). AAZ57558 and AAY68186 to
XX CC AAY68316 are sequences used in the exemplification of the present
XX CC invention. (Updated on 12-SEP-2003 to standardise OS field)
XX SQ Sequence 16 AA;
XX Query Match 100.0%; Score 77; DB 3; Length 16;
XX Best Local Similarity 100.0%; Pred. No. 9.5e-05;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX QY 1 RIQPGGFAFVTIGK 15
XX DB |||||
XX 2 RIQPGGFAFVTIGK 16
XX RESULT 48
XX AAY52857
XX ID AAY52857 standard; peptide; 16 AA.
```

```
XX AC AAY52857;
XX DT 14-FEB-2000 (first entry)
XX DE
XX DE Altered MHC determinant binding peptide SEQ ID NO:35.
XX KW Major histocompatibility complex; MHC class I; MHC class II; antigen;
XX KW immune response; diagnosis; antibody; immunisation; autoimmune disease;
XX KW acquired immune deficiency syndrome; AIDS; cytostatic; dermatological;
XX KW anti-inflammatory; neuroprotective; immunosuppressive; antithyroid;
XX KW vaccine; lupus erythematosus; multiple sclerosis; thyroiditis;
XX KW toxic shock; tumour; snakebite.
XX OS Synthetic.
XX OS Human immunodeficiency virus 1.
XX PN US5976551-A.
XX PD 02-NOV-1999.
XX PF 07-JUN-1995; 95US-00484905.
XX PR 15-NOV-1991; 91US-00792473.
XX PR 05-DEC-1991; 91US-00801818.
XX PA (INSP ) INST PASTEUR.
XX PA (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.
XX PI Kourileky P, Mottez E, Abastado J;
XX PI WPI; 2000-037081/03.
XX DR
XX PT Composition containing an antigen and altered major histocompatibility
XX PT Class II determinant, used to immunize against autoimmune diseases, e.g.
XX PT acquired immune deficiency syndrome.
XX PS Claim 8; Col 11; 96pp; English.
XX CC
XX CC The present invention describes a composition capable of eliciting anti-
XX CC major histocompatibility (MHC) antibodies. The composition comprises an
XX CC antigen associated with an altered MHC Class II determinant (I)
XX CC comprising alpha1, alpha2, beta1 and beta2 polypeptide domains encoded by
XX CC a mammalian MHC Class II locus covalently linked to form a polypeptide
XX CC (I) containing beta2, alpha2, alpha1 and beta1 domains in sequence. The
XX CC resulting Antigen-MHC complex is recognizable by the T cell receptor. The
XX CC compositions are used for immunisation against, or treatment of, a wide
XX CC range of autoimmune diseases, e.g. acquired immune deficiency syndrome
XX CC (AIDS), lupus erythematosus, multiple sclerosis, thyroiditis, toxic
XX CC shock, tumour and snakebite, depending on the nature of antigen. (I) is
XX CC also used to analyse functional interactions between the various domains
XX CC and for targeting lymphocyte receptors. Antibodies against (I) are
XX CC produced by usual methods of immunisation or cell fusion, and may be
XX CC humanised by standard methods. These antibodies are useful for diagnosis
XX CC (detection or purification of MHC gene products), therapy (neutralising
XX CC MHC on cell surfaces) and in the study of MHC and cellular processes. In
XX CC the exemplification of the present invention
XX SQ Sequence 16 AA;
XX Query Match 100.0%; Score 77; DB 3; Length 16;
XX Best Local Similarity 100.0%; Pred. No. 9.5e-05;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX QY 1 RIQPGGFAFVTIGK 15
XX DB |||||
XX 2 RIQPGGFAFVTIGK 16
XX RESULT 49
XX AAY52857
XX ID AAY52857 standard; peptide; 16 AA.
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XX AC AAB58618;
XX DT 11-SEP-2003 (revised)
XX DT 13-MAR-2001 (first entry)
XX DE Altered MHC determinant binding peptide #17.
XX KW Major histocompatibility complex; MHC class I; immune; snake bite;
XX KW T cell mediated autoimmune disease; AIDS; lupus erythematosus;
XX KW toxic shock.
XX OS Human immunodeficiency virus; type 8.
XX PN US6153408-A.
XX PD 28-NOV-2000.
XX PF 09-JAN-1995; 95US-00370476.
XX PR 15-NOV-1991; 91US-00792473.
XX PR 05-DEC-1991; 91US-00801818.
XX PR 07-JUN-1993; 93US-00072787.
XX PR 07-SEP-1993; 93US-00117575.
XX PA (INSP ) INST PASTEUR.
XX PA (INRM ) INST NAT SANTE & RECH MEDICAL.
XX PI Abastado J, Kourilsky P, Casrouge A, Ojcius D, Lone Y, Mottez E;
XX WPI; 2001-060089/07.
XX
XX New altered major histocompatibility complex (MHC) class I determinant
XX useful for eliciting an immune response and/or for immunizing against or
XX treating diseases, for example, multiple sclerosis, AIDS, toxic shock or
XX snake bite.
XX PS Disclosure; Col 11; 105pp; English.
XX
XX The present invention relates to a major histocompatibility complex (MHC)
XX class I determinant, which has alpha_1 alpha_2 alpha_3 and beta2-
XX microglobulin polypeptide domains encoded by a mammalian MHC class I
XX locus. The MHC class I determinants are useful for activating the immune
XX system and presenting antigens to the immune system to elicit an
XX antigenic response. The MHC class I determinants are also useful for
XX treating diseases, e.g. T cell mediated autoimmune disease, AIDS, lupus
XX erythematosus, toxic shock or snake bite. The altered MHC class I
XX determinants and compositions containing antigens bound to the
XX determinants are useful in diagnostic applications, e.g. altered
XX determinants may be used to target lymphocyte receptors and the resulting
XX bound determinant can be assayed. (Updated on 11-SEP-2003 to standardise
XX OS field)
XX SQ Sequence 16 AA;

Query Match 100.0%; Score 77; DB 4; Length 16;
Best Local Similarity 100.0%; Pred. No. 9.5e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQRGPGRAFTVIGK 15
Db 2 RIQRGPGRAFTVIGK 16

RESULT 50
AAR42057
ID AAR42057 standard; peptide; 17 AA.
XX AC AAR42057;
XX DT 25-MAR-2003 (revised)
XX DT 29-APR-1994 (first entry)
XX

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DE Peptide CG-P18 from HIV-1 IIIB env protein V3 loop.
XX
KW Human Immunodeficiency Virus type 1; envelope protein; immunogen;
KW vaccine; AIDS; peptide P18; epitope.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Peptide 3..17
FT /label= P-18
FT /note= "the Cys-Gly dipeptide is opt. absent"
XX
PN WO9319775-A1.
XX
XX 14-OCT-1993.
XX
XX 25-MAR-1993; 93WO-US002978.
XX
XX 31-MAR-1992; 92US-00860707.
XX
XX (MEDI-) MEDIMMUNE INC.
XX (USSA ) US DEPT ARMY.
XX
XX Alving CR, Cassatt D, Koenig S, Wassef N, White W;
XX WPI; 1993-336590/42.
XX
XX Inducing cytotoxic T lymphocyte response to HIV - with liposome contg.
XX peptide or protein having CTL epitope of HIV and protein, also improving
XX humoral immunity, useful in vaccines.
XX
XX Claim 4; Page 16; 25pp; English.
XX
XX Peptide P-18, opt. with a Cys-Gly dipeptide attached at its N-terminus,
XX is the pref. peptide for use in raising a cytotoxic T lymphocyte response
XX against HIV. The peptide is encapsulated in a liposome for admin.
XX (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 17 AA;

Query Match 100.0%; Score 77; DB 2; Length 17;
Best Local Similarity 100.0%; Pred. No. 0.0001;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQRGPGRAFTVIGK 15
Db 3 RIQRGPGRAFTVIGK 17

RESULT 51
AAY40414
ID AAY40414 standard; peptide; 17 AA.
XX
XX AC AAY40414;
XX
XX 25-NOV-1999 (first entry)
XX
XX Lipopeptide comprising a fragment of the HIV env protein.
XX
XX Lipopeptide; antigen; cytotoxic T lymphocyte; steroid; vaccine;
XX HIV related condition; tumor cell; NP protein.
XX
XX Synthetic.
XX OS Human immunodeficiency virus 1.
XX
XX Key Location/Qualifiers
FT Modified-site 1
FT /note= "amidated residue"
FT Modified-site 17
FT /note= "this residue is -NH-CHR-CO-NH2, where R is a C14
XX side chain"
XX
XX EP945461-A1.

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XX PD 29-SEP-1999.
XX PF 18-DEC-1991; 99EP-00105773.
XX PR 18-DEC-1990; 90FR-00015870.
XX PR 18-DEC-1991; 91EP-00403446.
XX PF (INSP ) INST PASTEUR LILLE.
XX PA (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.
XX PI Boutillon C, Martinon F, Sergheraert C, Magne R, Gras-Masse H;
XX PI Gonnard E, Tartar A, Levy J;
XX DR WPI; 1999-553128/47.
XX PT New lipopeptide inducers of cytotoxic T lymphocytes, useful as vaccine
XX PT against cancers, viruses, parasites and HIV-related conditions.
XX PS Example 4; Page 19; 35pp; French.
XX CC The specification describes lipopeptide that comprise a partial peptide
XX CC containing 10-40 amino acids and at least one antigenic determinant
XX CC specific for cytotoxic T lymphocytes. The lipopeptide comprises at least
XX CC one 10-20 carbon fatty acid derivatives and/or at least one modified
XX CC steroid group. The lipopeptides are useful for: the preparation of a
XX CC vaccine against HIV related conditions; immunizing a human or animal
XX CC against an antigen by inducing cytotoxic T-lymphocytes; immunizing a
XX CC human or animal against tumor cells; and immunizing human or animal
XX CC against pathogens (especially a virus e.g. HIV-1 and HIV-2, or
XX CC parasites). The present sequence represents a lipopeptide of the
XX CC invention, and comprises part of the HIV env protein
XX SQ Sequence 17 AA;
Query Match 100.0%; Score 77; DB 2; Length 17;
Best Local Similarity 100.0%; Pred. No. 0.0001;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 RIQGPGRGFAVFTIGK 15
Db 2 RIQGPGRGFAVFTIGK 16
RESULT 52
AAR31277
ID AAR31277 standard; peptide; 18 AA.
AC AAR31277;
DT 12-FEB-1993 (first entry)
DE HIV principal determinant peptide.
KW AIDS; ARC; human immunodeficiency virus; vaccine; Neisseria;
KW meningitidis b; outer membrane protein complex; OMPC; PND135-18.
XX Synthetic.
XX OS
XX FH Key Location/Qualifiers
XX FT Modified-site 1
XX FT /note= "bonds to the OMPC of the conjugate via this site"
XX PN EP467700-A.
XX PD 22-JAN-1992.
XX PF 19-JUL-1991; 91EP-00306598.
XX PR 19-JUL-1990; 90US-00555339.
XX PR 19-JUL-1990; 90US-00555966.
XX PR 19-JUN-1991; 91US-00715276.
XX PR 19-JUN-1991; 91US-00715278.

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XX PA (MERI ) MERCK & CO INC.
XX PI Leanza WJ, Marburg S, Tolman RL, Emini EA;
XX DR WPI; 1992-026505/04.
XX PT Conjugate proteins comprising HIV peptide components - useful for
XX PT preparing vaccines for e.g. AIDS or for treating infections.
XX PS Claim 12; Page 56; 63pp; English.
XX CC The invention relates to a co-conjugate comprising an immunogenic protein
XX CC or protein complex having a first set of covalent linkages to low
XX CC molecular weight moieties which have an anionic or polyanionic character
XX CC at physiological pH, and a second set of covalent linkages to peptides
XX CC comprising HIV principal neutralizing determinants (PND's) or
XX CC immunologically equivalent peptides. Preferably at least one set of the
XX CC covalent linkages is comprised of maleimide derivatives; the
XX CC (poly)anionic moiety is composed of one to five residues of the anionic
XX CC form of a carboxylic, sulphonic or phosphonic acid; the immunogenic
XX CC protein is the outer membrane protein complex (OMPC) of Neisseria
XX CC meningitidis b; and the PND peptide has a linear structure, a disulphide-
XX CC bonded cyclic structure, an amide-bonded cyclic structure or a thioether-
XX CC of a PND peptide component used in the co-conjugate. The co-conjugate is
XX CC useful for inducing anti-peptide immune response in mammals, for inducing
XX CC HIV-neutralizing antibodies in mammals, for formulating vaccines to
XX CC prevent HIV infection or disease, including AIDS, or for treating humans
XX CC afflicted with HIV infection or disease
XX SQ Sequence 18 AA;
Query Match 100.0%; Score 77; DB 2; Length 18;
Best Local Similarity 100.0%; Pred. No. 0.00011;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 RIQGPGRGFAVFTIGK 15
Db 1 RIQGPGRGFAVFTIGK 15
RESULT 53
AAR30032
ID AAR30032 standard; peptide; 18 AA.
XX AC AAR30032;
XX DT 25-MAR-2003 (revised)
XX DT 28-APR-1993 (first entry)
XX DE HIV principle neutralising determinant 135-18.
XX KW Human immunodeficiency virus; AIDS; PND; MTEP; conjugate;
XX KW major immune enhancing protein; vaccine; anti-HIV antibodies; immunogen;
XX KW passive immunisation.
XX OS Human immunodeficiency virus.
XX PN EP519554-A1.
XX XX 23-DEC-1992.
XX PF 11-JUN-1992; 92EP-00201693.
XX PF 19-JUN-1991; 91US-00715273.
XX PR (MERI ) MERCK & CO INC.
XX PA Emini A, Liu MA, Marburg S, Tolman RL;
XX PI WPI; 1992-425771/52.
XX PR

```

PT Conjugates of HIV-1 PND peptide(s) with the MIEP of Neisseria  
PT meningitidis - useful as a vaccine for treating and preventing HIV-1  
PT infection, e.g. AIDS in humans.  
PS  
PS Claim 9; Page 59; 66pp; English.  
XX  
CC The peptide is HIV principle neutralising determinant (PND) 135-18 and is  
CC used as part of a conjugate comprising the major immune enhancing protein  
CC (MIEP) of Neisseria meningitidis covalently linked to the HIV PND. The  
CC conjugate may be used to prepare vaccines against HIV infections, e.g.  
CC AIDS, as research tools for studying PND structure- function  
CC relationships, or as immunogens for use in the passive immunisation of  
CC humans. (Updated on 25-MAR-2003 to correct PN field.)  
XX  
SQ Sequence 18 AA;  
Query Match 100.0%; Score 77; DB 2; Length 18;  
Best Local Similarity 100.0%; Pred. No. 0.00011;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RIQRGPGRAFTVIGK 15  
Db 1 RIQRGPGRAFTVIGK 15  
RESULT 54  
AAR26713  
ID AAR26713 standard; peptide; 18 AA.  
AC AAR26713;  
XX  
DT 09-FEB-1993 (first entry)  
XX  
DE HIV-PND-polysaccharide-protein conjugate vaccine.  
XX  
KW Human immunodeficiency virus; principal neutralizing determinant;  
KW outer membrane protein complex; OMPC; Neisseria; AIDS; PND-135-18.  
XX  
OS Synthetic.  
XX  
PH Key Location/Qualifiers  
FT Modified-site 1  
FT /note= "Joins onto polysaccharide-protein complex via  
FT this site"  
XX  
PN EP468714-A.  
XX  
PD 29-JAN-1992.  
XX  
PF 19-JUL-1990; 90US-00555558.  
XX  
PR 19-JUL-1990; 90US-00555558.  
PR 19-JUL-1990; 90US-00555974.  
PR 19-JUN-1991; 91US-00715275.  
PR 19-JUN-1991; 91US-00715277.  
XX  
PA (MERI ) MERCK & CO INC.  
XX  
XX Marburg S, Tolman RL, Emini EA;  
XX  
XX WPI; 1992-034437/05.  
XX  
FT HIV peptide-polysaccharide-protein conjugates - used in vaccines or to  
FT produce antibodies to prevent or treat HIV infection.  
XX  
PS Claim 9; Page 57; 63pp; English.  
XX  
CC The invention relates to a conjugate of an HIV principal neutralizing  
CC determinant (PND), or an immunologically equivalent peptide (PEP),  
CC covalently coupled to an immunogenic protein or protein complex through  
CC an anionic polysaccharide linker. Pref. the immunogenic protein is the  
CC outer membrane protein complex (OMPC) of Neisseria meningitidis b and the  
CC PND peptide has a linear structure, a disulphide-bonded cyclic structure,  
CC

CC an amide-bonded cyclic structure or a thioether-bonded cyclic structure.  
CC The present sequence (PND135-18) is an example of a PND peptide  
CC component. The conjugates are used for inducing HIV-neutralising  
CC antibodies or for making vaccines to prevent contraction of HIV infection  
CC or disease. The antibodies can be used for passively protecting against  
CC infection by HIV, or for protecting against proliferation of HIV post-  
CC infection, or for treating AIDS, or in diagnostic assays  
XX  
SQ Sequence 18 AA;  
Query Match 100.0%; Score 77; DB 2; Length 18;  
Best Local Similarity 100.0%; Pred. No. 0.00011;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RIQRGPGRAFTVIGK 15  
Db 1 RIQRGPGRAFTVIGK 15  
RESULT 55  
AAR44190  
ID AAR44190 standard; peptide; 18 AA.  
XX  
AC AAR44190;  
XX  
DT 24-OCT-2003 (revised)  
DT 25-MAR-2003 (revised)  
DT 20-MAY-1994 (first entry)  
XX  
DE gp120 V3 loop antigen B2.  
XX  
KW Antigen; B2; third variable domain; V3 loop; gp120; HIV-1; vaccine;  
KW strain IIB; multiple antigenic peptide system; dendritic core;  
KW lipophilic membrane anchoring group; mammal; humoral; immunisation;  
KW cytotoxic T cell; CT; immune response; infection; Freund's adjuvant;  
KW pathogen; HIV; influenza; malaria.  
XX  
OS Human immunodeficiency virus 1.  
XX  
PN WO9322343-A1.  
XX  
PD 11-NOV-1993.  
XX  
PF 03-MAY-1993; 93WO-US004179.  
XX  
PR 01-MAY-1992; 92US-00877613.  
XX  
PA (UYRQ ) UNIV ROCKEFELLER.  
XX  
XX Tam JP;  
XX  
XX WPI; 1993-368723/46.  
XX  
FT New multiple antigen system esp. for use in HIV vaccines - contains  
FT lipophilic membrane anchor imparting adjuvant activity, and peptide  
FT antigens coupled to dendritic core.  
XX  
PS Example 3; Page 27; 55pp; English.  
XX  
CC The sequence given in AAR44190 is a peptide antigen, B2, which represents  
CC residues 312-329 of the third variable domain (V3 loop) of gp120, of HIV-  
CC 1 strain IIB. This sequence was attached to an amino acid linker (see  
CC also AAR44191) in the production of a multiple antigenic peptide system.  
CC This system comprises a dendritic core to which are covalently attached  
CC at least one peptide, eg. an antigenic peptide, and a lipophilic membrane  
CC anchoring group. This system may be injected into a mammal and elicits  
CC both humoral and cytotoxic T cell (CTL) immune responses. This system may  
CC be used to immunise against HIV infection. The lipophilic membrane  
CC anchoring group provides efficient adjuvant activity without the toxicity  
CC problems of Freund's adjuvant, while the dendritic structure allows  
CC multiple antigens to be attached. Optionally the antigens may be derived  
CC from different pathogens, providing vaccines which protect against more  
CC than one disease, eg. HIV, influenza and malaria. (Updated on 25-MAR-2003

```

CC to correct PN field.) (Updated on 24-OCT-2003 to standardise OS field)
XX
SQ Sequence 18 AA;

  Query Match      100.0%; Score 77; DB 2; Length 18;
  Best Local Similarity 100.0%; Pred. No. 0.00011;
  Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGPAFTVIGK 15
Db 4 RIQPGGPAFTVIGK 18

RESULT 56
AAR58548
ID AAR58548 standard; peptide; 18 AA.
XX
AC AAR58548;
XX
DT 16-OCT-2003 (revised)
DT 25-MAR-2003 (revised)
DT 29-MAR-1995 (first entry)
XX
DE HIV-1 isolate IIB V3 loop domain.
XX
KW HIV-1; V3 loop; multiple epitope; AIDS; vaccine; MEAV; Escherichia coli;
KW PKK-MEAV.
XX
OS Human immunodeficiency virus 1.
XX
PN WO9418234-A1.
XX
PD 18-AUG-1994.
XX
PF 10-FEB-1994; 94WO-US001523.
XX
PR 10-FEB-1993; 93US-00015770.
XX
PA (UNBI-) UNITED BIOMEDICAL INC.
XX
PI Shen DF, Wang CY;
XX
DR WPI; 1994-279687/34.
XX
  New recombinant proteins contg multiple antigenic determinants - linked
  by flexible hinge domains.
XX
  Disclosure; Page 36; 56pp; English.
XX
  MEAV gene (AAQ70535) encodes a portion of the CD4 binding domain
  (AAR58550) of HIV env protein, the domain being capable of inducing a
  helper T- cell response, and 5 peptide domains from the V3 loop of HIV-1
  isolates MN, SC, RF, IIB and WMJ2 (AAR58545-49), each peptide being
  separated by a spacer domain (AAR58551). The gene was expressed in E.
  coli BL21/pKK-MEAV for preparation of a multiple epitope AIDS vaccine
  (AAR58552). (Updated on 25-MAR-2003 to correct PN field.) (Updated on 16-
  OCT-2003 to standardise OS field)
XX
SQ Sequence 18 AA;

  Query Match      100.0%; Score 77; DB 2; Length 18;
  Best Local Similarity 100.0%; Pred. No. 0.00011;
  Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGPAFTVIGK 15
Db 4 RIQPGGPAFTVIGK 18

RESULT 57
ABB83113
ID ABB83113 standard; peptide; 18 AA.
XX

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```

AC ABB83113;
XX
DT 05-AUG-2002 (first entry)
XX
DE Lipopeptide #2 used in a vaccine.
XX
KW Lipopeptide; cytostatic; virucide; anti-HIV; antiparasitic; vaccine;
KW immunisation; tumour; pathogen; virus; antiviral.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 1 /label= Xaa
FT /note= "Xaa is optionally 2-acetyl amino-hexadecanoyl, 2,4
FT -bis(hexadecanoylamino)butyryl, or not present"
FT Modified-site 18 /label= Xaa
FT /note= "Xaa is optionally 2-amino-hexadecanoamide or N-
FT epsilon-hexadecanoyl-Lys"
XX
PN EP1065212-A2.
XX
PD 03-JAN-2001.
XX
PF 18-DEC-1991; 2000EP-00117513.
XX
PR 18-DEC-1990; 90FR-00015870.
PR 18-DEC-1991; 91EP-00403446.
PR 18-DEC-1991; 99EP-00105773.
XX
PA (INSP ) INST PASTEUR LILLE.
PA (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.
XX
PI Boutillon C, Martinon F, Sergheraert C, Magne R, Gras-Masse H;
PI Gomard B, Tartar A, Levy J;
XX
DR WPI; 2001-114040/13.
XX
  Vaccine for immunization against tumor cells or pathogens, especially
  HIV, comprising peptide part, antigenic determinant specifically inducing
  cytotoxic T-lymphocytes and N-palmitoyl-lysine-derived chain(s).
XX
  Example 4; Page 17; 31pp; French.
XX
  The present sequence is a lipopeptide, which can be used for the
  immunisation of humans or animals against tumour cells or pathogens,
  specifically viruses, especially HIV-1 or HIV-2. The pathogens may also
  include parasites. Examples illustrate immunisation of mice against
  influenza, as well as HIV. The lipopeptide, with the appropriate
  antigenic determinants, can induce a strong cytotoxic T-lymphocyte
  response in a host organism against a wide range of pathogens. Addition
  of an adjuvant is unnecessary
XX
SQ Sequence 18 AA;

  Query Match      100.0%; Score 77; DB 4; Length 18;
  Best Local Similarity 100.0%; Pred. No. 0.00011;
  Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGPAFTVIGK 15
Db 3 RIQPGGPAFTVIGK 17

RESULT 58
AAR60203
ID AAR60203 standard; protein; 20 AA.
XX
AC AAR60203;
XX
DT 27-AUG-2003 (revised)
DT 25-MAR-2003 (revised)

```

DT 13-MAR-1995 (first entry)  
 XX HIV gp110 V3 loop molecular tag.  
 DE  
 KW fusion protein; recombinant bispecific single chain antibody;  
 KW human immunodeficiency virus; glycoprotein gp110; V3 loop.  
 OS Human immunodeficiency virus.  
 XX  
 PN EP610046-A2.  
 XX  
 PD 10-AUG-1994.  
 XX  
 PF 31-JAN-1994; 94EP-00300692.  
 XX  
 PR 01-FEB-1993; 93US-00013420.  
 PR 13-SEP-1993; 93US-00121054.  
 XX  
 PA (BRIM ) BRISTOL-MYERS SQUIBB CO.  
 XX  
 PI Ledbetter JA, Gilliland LK, Hayden MS, Linsley PS, Bajorath J;  
 PI Fell PH;  
 DR WPI; 1994-250885/31.  
 XX  
 XX Expression vector encoding bispecific fusion protein - having binding  
 PT domains for separate targets joined by helical peptide, useful e.g. for  
 PT diagnosis and treatment.  
 XX  
 PS Example 1; Page 12; 50pp; English.  
 XX  
 CC A molecular tag was created by annealing two complementary 76mer  
 CC oligonucleotides with cohesive end overhangs. AAQ70167 is the sense  
 CC strand and includes a BclI overhang, the HIV gp110 V3 loop coding  
 CC sequence and a stop codon. The peptide encoded by the molecular tag  
 CC (AAQ60203), when part of a single chain fusion protein with binding  
 CC regions from different antibodies, affected the avidity and binding  
 CC specificity of the antibodies. For example, the tag failed to function  
 CC properly when fused to I6 but performed successfully when fused to CD3.  
 CC (Updated on 25-MAR-2003 to correct PN field.) (Updated on 27-AUG-2003 to  
 CC correct OS field.)  
 XX  
 SQ Sequence 20 AA;  
 Query Match 100.0%; Score 77; DB 2; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 0.00012;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQPGGCGRAFTVIGK 15  
 DB |||||||  
 5 RIQPGGCGRAFTVIGK 19  
 RESULT 59  
 AAW54930  
 ID AAW54930 standard; peptide; 20 AA.  
 XX  
 AC AAW54930;  
 XX  
 XX 25-SEP-1998 (first entry)  
 DT  
 DE HIV gp120 envelope protein, peptide 127, analogue 127h'.  
 XX  
 KW Immunoadsorbent; immunoassay; HIV gp120; immunogen; antibody; Human.  
 XX  
 OS Human immunodeficiency virus.  
 XX  
 PN US5763160-A.  
 XX  
 PD 09-JUN-1998.  
 XX  
 PF 07-JUN-1995; 95US-00488252.  
 XX

PR 12-FEB-1988; 88US-00155321.  
 PR 01-MAR-1991; 91US-00663262.  
 PR 09-JUL-1991; 91US-00726605.  
 PR 19-OCT-1994; 94US-00326676.  
 XX  
 PA (UNBI-) UNITED BIOMEDICAL INC.  
 XX  
 PI Wang CY;  
 XX  
 DR WPI; 1998-347301/30.  
 XX  
 PT HIV gp120 peptides - useful as immunoassay reagents or vaccine  
 PT components.  
 XX  
 PS Example 8; Column 21/22; 34pp; English.  
 XX  
 CC Peptides AAW54903-W54941 can be used as an immunoassay in an  
 CC immunoassay for detecting antibodies to HIV gp120, or as an immunogen for  
 CC eliciting antibodies to HIV in a mammal  
 XX  
 SQ Sequence 20 AA;  
 Query Match 100.0%; Score 77; DB 2; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 0.00012;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQPGGCGRAFTVIGK 15  
 DB |||||||  
 6 RIQPGGCGRAFTVIGK 20  
 RESULT 60  
 ADR18886  
 ID ADR18886 standard; peptide; 20 AA.  
 XX  
 AC ADR18886;  
 XX  
 DT 04-NOV-2004 (first entry)  
 XX  
 DE HIV-1 V3-IIIB related peptide SEQ ID NO:37.  
 XX  
 KW three-dimensional atomic structural conformation;  
 KW protein co-ordinate data; V3 loop peptide; HIV-1; envelope glycoprotein;  
 KW gp120; human monoclonal antibody 447-52D;  
 KW murine monoclonal antibody 0.5 beta; immunogen; immunogenic;  
 KW V3 loop epitope; HIV-1 infectivity inhibitor; anti-HIV; vaccine;  
 KW HIV-1 infection.  
 XX  
 OS Human immunodeficiency virus 1.  
 OS Synthetic.  
 XX  
 PN WO2004069863-A2.  
 XX  
 PD 19-AUG-2004.  
 XX  
 PF 04-FEB-2004; 2004WO-US003304.  
 XX  
 PR 04-FEB-2003; 2003US-0444682P.  
 XX  
 PA (UUNY ) UNIV NEW YORK STATE.  
 PA (YEDA ) YEDA RES & DEV CO LTD.  
 XX  
 PI Anglister J, Sharon M, Schapira M, Zolla-Pazner S, Rosen O;  
 XX  
 DR WPI; 2004-625447/60.  
 XX  
 PT Composition for inhibiting HIV-1 infection, comprises isolated peptide  
 PT molecule that mimics atomic structural conformation of V3 loop peptide of  
 PT HIV-1 envelope glycoprotein that is bound to, and constrained by human  
 PT monoclonal antibody.  
 XX  
 PS Example 1; SEQ ID NO 37; 127pp; English.  
 XX



CC The present invention describes a composition (C1) which comprises an  
CC isolated peptide molecule or isostere that mimics the three-dimensional  
CC (3D) atomic structural conformation of the V3 loop peptide of the HIV-1  
CC envelope glycoprotein gp120 that is bound to, and constrained by, human  
CC monoclonal antibody (MAb) 447-52D, murine MAb 0.5 beta or an antigen  
CC binding fragment of the MAb, where the constrained V3 loop peptide  
CC differs in conformation from the same V3 loop peptide when it is in free  
CC form. Also described: (1) identifying (M1) from several existing  
CC compounds a molecule that is useful as an HIV-1 V3 loop immunogen or as  
CC an inhibitor of binding of HIV-1 to a chemokine receptor/HIV-1 co-  
CC receptor on the surface of a receptor-bearing target cell; (2) designing  
CC a molecule that is useful as an HIV-1 V3 loop immunogen or as an  
CC inhibitor of binding of HIV-1 to a chemokine receptor/HIV-1 co-receptor  
CC on the surface of a receptor-bearing target cell; (3) a composition (C2)  
CC that is useful as an HIV-1 V3 loop immunogen or as an inhibitor of  
CC binding of HIV-1 to a chemokine receptor/HIV-1 co-receptor on the surface  
CC of a receptor-bearing target cell; (4) an immunogenic composition (C3)  
CC for induction of an anti-HIV-1 antibody response specific for a V3 loop  
CC epitope, comprising (C1) and an excipient; (5) a pharmaceutical  
CC composition (C4) useful for blocking the interaction of HIV-1 with an R5  
CC or X4 co-receptor and thereby inhibiting HIV-1 infectivity, comprising  
CC (C1) and a carrier or excipient; (6) a computing platform for generating  
CC a 3D model of a constrained HIV V3 view peptide; (7) a computer generated  
CC model representing the conformationally constrained structure of a V3  
CC loop peptide that is bound to 447-52D or 0.5beta MAb or its antigen  
CC binding fragments, comprising a 3D atomic structure defined by NC; and  
CC (8) a computer readable medium (CM) comprising, in a retrievable format,  
CC data that includes a set of structure coordinates defining a 3D structure  
CC of a V3 loop peptide that is conformationally constrained by being bound  
CC to 447-52D or 0.5beta MAb or its antigen binding fragment. (C1) has anti-  
CC HIV activities, and can be used in vaccines, and as an inhibitor of  
CC binding of HIV-1 to chemokine receptor/HIV-1 co-receptor. (C1) is useful  
CC for in vivo inhibition of HIV-1 infection. (C1) or (C2) is useful for  
CC producing a medication utilised for treating or preventing HIV-1  
CC infection. (C3) or (C4) is useful for inducing in a subject an anti-HIV-1  
CC neutralising antibody response specific for a V3 loop epitope. (C4) is  
CC useful for preventing an HIV-1 infection in an uninfected subject at risk  
CC for such infection or for inhibiting viral spread and disease progression  
CC in an infected subject. The present sequence represents a peptide used in  
CC the exemplification of the present invention.

XX SQ Sequence 20 AA;

Query Match 100.0%; Score 77; DB 8; Length 20;  
Best Local Similarity 100.0%; Pred. No. 0.00012;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQRPGRFAFTIGK 15  
| | | | | | | | | | | | | | | |  
Db 6 RIQRPGRFAFTIGK 20

RESULT 61  
AAR93073  
ID AAR93073 standard; peptide; 21 AA.

XX AC AAR93073;

XX DT 27-SEP-1996 (first entry)

XX DE Antigenic peptide CLTB73.

XX KW Antigen; non-infectious; retrovirus; antigenic marker; immune response;  
XX long terminal repeat; gag; pol; env; AIDS; HIV; antibody; therapy.

XX OS Synthetic.

XX PN WO9605292-A1.

XX XX 22-FEB-1996.

XX PF 15-AUG-1995; 95WO-CA000483.

XX XX

PR 15-AUG-1994; 94US-00290105.

PA (CONN-) CONNAUGHT LAB LTD.

XX PI Rovinski B, Cao S, Yao F, Persson R, Klein MH;

XX DR WPI; 1996-139690/14.

XX Antigenically marked non-infectious retrovirus-like particles - used to  
PT vaccinate against, and in the treatment of, AIDS and AIDS related  
PT conditions.

PS Example 4; Page 38; 75pp; English.

XX AAR93071-R93074 represent sequences used as antigenic marker epitopes in  
CC a non-infectious retrovirus-like particle of the invention. This sequence  
CC represents the antigenic peptide CLTB73. The retrovirus-like particle  
CC contains 1-4 repeats of this sequence (or AAR93061). The coding sequence  
CC for the retroviral particle of the invention comprises a modified  
CC retroviral genome deficient in long terminal repeats, but containing the  
CC gag, pol and env genes in their natural genomic arrangement, along with  
CC the antigenic marker sequence. The retroviral particle can be used in an  
CC immunogenic composition capable of eliciting a retroviral specific immune  
CC response. The composition is for parenteral or mucosal administration,  
CC preferably oral, anal, vaginal or intranasal administration. The  
CC composition can be used for immunising a host to produce a retroviral  
CC specific immune response, such as against AIDS and AIDS related  
CC conditions. The particles may also be used in the prophylactic (or  
CC curative) treatment of AIDS and related conditions, by acting to displace  
CC the binding of the HIV virus to human or animal cells, or by disrupting  
CC the 3-dimensional organisation of the virus. The particle can also be  
CC used to identify antibodies specifically reacting with retrovirus  
CC antigens

XX SQ Sequence 21 AA;

Query Match 100.0%; Score 77; DB 2; Length 21;

Best Local Similarity 100.0%; Pred. No. 0.00012;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQRPGRFAFTIGK 15  
| | | | | | | | | | | | | | | |  
Db 7 RIQRPGRFAFTIGK 21

RESULT 62

AAW34475

ID AAW34475 standard; peptide; 21 AA.

XX AC AAW34475;

XX DT 11-MAY-1998 (first entry)

XX DE Acceptor peptide HIV-V3.

XX KW UDP-N-acetyl-alpha-D-galactosamine;  
XX polypeptide N-acetylgalactosaminyltransferase; GalNAc-t3; human;  
XX glycosylation; HIV-V3.

XX OS Synthetic.

XX OS Human immunodeficiency virus.

XX PN WO9743405-A1.

XX PD 20-NOV-1997.

XX PF 15-MAY-1997; 97WO-DK000226.

XX PR 15-MAY-1996; 96US-00648298.

XX PA (CLAU/) CLAUSEN H.

XX PA (BENN/) BENNETT E P.

XX XX

PI Clausen H, Bennett EP;  
 XX WPI; 1998-008874/01.  
 XX New isolated N-acetyl-galactosaminyl-transferase enzyme - used for the  
 PT production of glycosylated polypeptide(s) having particular enzymatic,  
 PT immunogenic or other biological or physical properties.  
 XX  
 PS Example 2; Page 30; 70pp; English.  
 XX  
 CC Acceptor peptides Muc2, Muc5c (see AAW34474) and HIV-V3 (see AAW34475)  
 CC were used to study the acceptor substrate specificity of the novel human  
 CC N-acetylgalactosaminyltransferase GalNac-T3 (see AAW34470). Expression of  
 CC a soluble GalNac-T3 construct in Sf9 cells resulted in significant  
 CC increases in GalNac-transferase activity in the culture medium of  
 CC infected cells compared to uninfected controls or cells infected with the  
 CC host-blood group O2 gene. GalNac-transferase activity with the Muc2  
 CC acceptor peptide was increased 20-fold, and activity with the HIV-V3  
 CC peptide was increased nearly 100-fold. In contrast, expression of GalNac-  
 CC T1 and -T2 constructs only increased the GalNac-transferase activity  
 CC toward Muc2 and Muc5C peptide substrates. This illustrates the unique  
 CC acceptor substrate specificity of GalNac-T3. The enzyme is used in  
 CC claimed methods for the glycosylation of peptides and proteins and for  
 CC producing vaccines by modifying the O-glycosylation pattern of eukaryotic  
 CC cells  
 XX  
 XX Sequence 21 AA;

Query Match 100.0%; Score 77; DB 2; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 0.00012;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRFAFTVIGK 15  
 |||||  
 DB 3 RIQGPGRFAFTVIGK 17

RESULT 63  
 AAW75478  
 ID AAW75478 standard; peptide; 21 AA.  
 XX  
 AC AAW75478;  
 XX  
 DT 17-OCT-2003 (revised)  
 DT 20-MAR-2003 (revised)  
 DT 27-APR-1999 (first entry)  
 XX  
 DE HIV-1 strain HXB2 gp120 V3 loop peptide amino acids 302-322.  
 XX  
 KW V3 loop; gp120 protein; HIV-1; retrovirus-like particle; genome; HIV-2;  
 KW long terminal repeat; LTR; chimeric; envelope; glycoprotein; HTLV-I;  
 KW HTLV-II; vaccine; human T-lymphotropic virus.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN US5866137-A.  
 XX  
 PD 02-FEB-1999.  
 XX  
 PF 30-MAY-1995; 95US-00453745.  
 XX  
 PR 15-JUN-1992; 92US-00839751.  
 PR 09-JUN-1993; 93US-00073526.  
 XX  
 PA (CONN-) CONNAUGHT LAB LTD.  
 XX  
 PI Klein MH, Cao SX, Haynes J, Rovinski B;  
 XX WPI; 1999-141864/12.  
 XX  
 PT Immunogenic retrovirus-like particle - with chimeric HIV-1 envelope  
 PT protein containing heterologous retroviral amino acid sequence.  
 XX

PS Example 4; Col 7-8; 12pp; English.  
 XX  
 CC This sequence represents a peptide from the V3 loop of the gp120 protein  
 CC from the human immunodeficiency virus type 1 (HIV-1) strain HXB2. The  
 CC peptide is used to determine antibody responses after immunisation with a  
 CC self-assembled, non-infectious, non-replicating, immunogenic, retrovirus-  
 CC like particle. The retrovirus-like particle comprises a modified HIV  
 CC genome devoid of long terminal repeats (LTRs) and contains a nucleotide  
 CC sequence coding for a chimeric envelope glycoprotein. The chimeric  
 CC envelope glycoprotein has the HIV-1 gp120 conserved region 2 and a second  
 CC retroviral envelope amino acid sequence from a heterologous strain of HIV  
 CC -1, HIV-2, HTLV-I or HTLV-II inserted into the first retroviral envelope  
 CC amino acid sequence (see AAW75474-W75477). The novel retrovirus-like  
 CC particle is useful in vaccines against HIV. (Updated on 20-MAR-2003 to  
 CC correct PA field.) (Updated on 17-OCT-2003 to standardise OS field)  
 XX  
 SQ Sequence 21 AA;

Query Match 100.0%; Score 77; DB 2; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 0.00012;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRFAFTVIGK 15  
 |||||  
 DB 7 RIQGPGRFAFTVIGK 21

RESULT 64  
 AAY16052  
 ID AAY16052 standard; peptide; 21 AA.  
 XX  
 AC AAY16052;  
 XX  
 DT 17-OCT-2003 (revised)  
 DT 20-MAR-2003 (revised)  
 DT 04-AUG-1999 (first entry)  
 XX  
 DE HIV-1 isolate HXB2 gp120 peptide.  
 XX  
 KW Retrovirus-like particle; modified HIV genome;  
 KW chimeric envelope glycoprotein; HIV-1 gp120; conserved region 2; HIV-1;  
 KW HIV-2; HTLV-I; HTLV-II; vaccine.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN US5912338-A.  
 XX  
 PD 15-JUN-1999.  
 XX  
 PF 30-MAY-1995; 95US-00452520.  
 XX  
 PR 15-JUN-1992; 92US-00839751.  
 PR 09-JUN-1993; 93US-00073526.  
 XX  
 PA (ROVI/) ROVINSKI B.  
 XX  
 PI Cao SX, Klein MH, Haynes J, Rovinski B;  
 XX WPI; 1999-357220/30.  
 XX  
 PT Immunogenic retrovirus like particles comprising modified HIV genomes,  
 PT useful as vaccines against HIV.  
 XX  
 PS Example 4; Col 9-10; 12pp; English.  
 XX

CC The specification describes a nucleic acid molecule encoding a self  
 CC assembled, non-infectious, non-replicating, immunogenic, retrovirus-like  
 CC particle. The retroviral particle comprises a modified HIV genome devoid  
 CC of long terminal repeats containing a nucleotide sequence coding for a  
 CC chimeric envelope glycoprotein which has a first (a) and second (b)  
 CC retroviral envelope amino acid sequence, where (a) contains the HIV-1  
 CC gp120 conserved region 2, and (b) contains a retroviral envelope amino  
 CC acid sequence of a heterologous strain of HIV-1, HIV-2, HTLV-I or HTLV-II

CC inserted into (a) at an endogenous site (BgIII and StuI). (b) may  
 CC comprise peptides AAY16049-51 and AAY16055. The nucleic acids are useful  
 CC as vaccines against HIV. The present sequence is used in the course of  
 CC the invention. (Updated on 20-MAR-2003 to correct PR field.) (Updated on  
 CC 17-OCT-2003 to standardise OS field)

XX SQ Sequence 21 AA;

Query Match 100.0%; Score 77; DB 2; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 0.00012;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGPGRGFAVTVIGK 15  
 Db 7 RIQGPGRGFAVTVIGK 21  
 |||||

RESULT 65  
 AAW85568  
 ID AAW85568 standard; peptide; 21 AA.  
 XX AC AAW85568;  
 XX DT 20-MAR-2003 (revised)  
 XX DT 24-FEB-1999 (first entry)

XX DE Human immunodeficiency virus type 1 derived peptide.  
 XX KW Immunoassay diagnostic kit; antibody detection;  
 XX KW chimeric envelope protein; HIV-1 gp120 conserved region 2; HIV-1; HIV-2;  
 XX KW HTLV-I; HTLV-II.  
 XX OS Synthetic.  
 XX OS Human immunodeficiency virus 1.

XX PN US5849475-A.  
 XX PD 15-DEC-1998.  
 XX PF 30-MAY-1995; 95US-00452503.  
 XX PR 15-JUN-1992; 92US-00839751.  
 XX PR 09-JUN-1993; 93US-00073526.  
 XX PA (CONN-) CONNAUGHT LAB LTD.  
 XX PI Klein MH, Cao SX, Haynes J, Rovinski B;  
 XX DR WPI; 1999-069713/06.

XX PT Immunoassay diagnostic kit for detecting antibodies - comprising chimeric  
 XX PT retrovirus-like particles.  
 XX PS Example 4; Col 9-10; 12pp; English.  
 CC The present sequence represents a Human immunodeficiency virus type 1  
 CC derived peptide. The peptide is used in the immunoassay diagnostic kit of  
 CC the invention. The specification describes an immunoassay diagnostic kit  
 CC for detecting antibodies in a sample, which comprises an antigen  
 CC consisting of a self-assembled, non-infectious, non-replicating,  
 CC immunogenic, retrovirus-like particle encoded by a modified HIV genome  
 CC that is devoid of long terminal repeats and contains a nucleotide  
 CC sequence coding for a chimeric envelope protein having a first amino acid  
 CC sequence containing HIV-1 gp120 conserved region 2 and a second amino  
 CC acid sequence containing an envelope sequence of a heterologous strain of  
 CC HIV-1, HIV-2, HTLV-I or HTLV-II. (Updated on 20-MAR-2003 to correct PR  
 CC field.) (Updated on 20-MAR-2003 to correct PA field.)

XX SQ Sequence 21 AA;

Query Match 100.0%; Score 77; DB 2; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 0.00012;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGPGRGFAVTVIGK 15  
 Db 7 RIQGPGRGFAVTVIGK 21  
 |||||

Qy 1 RIQGPGRGFAVTVIGK 15  
 Db 7 RIQGPGRGFAVTVIGK 21  
 |||||

RESULT 66

AA15012

ID AAB15012 standard; peptide; 21 AA.

XX AC AAB15012;

XX DT 07-DEC-2000 (first entry)

XX DE Peptide P18 derived from V3 loop of HIV IIIB group 120 protein.

XX KW HIV; immune; diphosphonate.

XX OS Human immunodeficiency virus.

XX PN WO200044758-A1.

XX PD 03-AUG-2000.

XX PF 01-FEB-2000; 2000WO-US002755.

XX PR 01-FEB-1999; 99US-0118131P.

XX PA (EISA) EISAI CO LTD.

XX PI Hawkins LD, Ishizaka ST, Lewis M, McGuinness P, Nault A, Rose J;  
 XX PI Rosignol DP;

XX DR WPI; 2000-514809/46.

XX PT New diphosphonate compounds, useful as immunological adjuvants for  
 XX PT stimulating an immune response to an antigen.  
 XX PS Example 8; Page 86; 130pp; English.

XX CC The present invention relates to diphosphonate compounds useful as  
 XX CC immunological adjuvants. The compounds can be used for stimulating an  
 XX CC immune response to an antigen. The present sequence is an immunogenic  
 XX CC peptide used to test the ability of the compounds to cause an increase in  
 XX CC the immune response. The peptide consists of an amino terminal cysteine  
 XX CC residue, a glycine/alanine/glycine spacer and amino acids 308-322 of the  
 XX CC V3 loop of HIV IIIB gp120 protein

XX SQ Sequence 21 AA;

Query Match 100.0%; Score 77; DB 3; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 0.00012;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGPGRGFAVTVIGK 15  
 Db 6 RIQGPGRGFAVTVIGK 20  
 |||||

RESULT 67

AAU08699

ID AAU08699 standard; peptide; 21 AA.

XX AC AAU08699;

XX DT 18-DEC-2001 (first entry)

XX DE Retrovirus-like particle CLTB73 containing a V3 (HXB2) antigenic marker.

XX KW Human immunodeficiency virus; HIV; retroviral antigen; gag; pol; env;  
 XX KW immune response; antigenic marker; antigenic epitope; retrovirus.

XX OS Human immunodeficiency virus.

OS Synthetic.  
 PN US6291157-B1.  
 XX  
 PD 18-SEP-2001.  
 XX  
 XX 23-FEB-1998; 98US-00027955.  
 PF  
 XX 23-FEB-1998; 98US-00027955.  
 PR  
 XX (CONN-) CONNAUGHT LAB LTD.  
 PA  
 XX Rovinski B, Cao S, Yao F, Persson R, Klein MH;  
 PI WPI; 2001-595518/67.  
 XX  
 DR Differentiating between infection by human immunodeficiency virus (HIV)  
 XX and antiserum generated by immunization against HIV, comprises use of non  
 PT -infectious, non-replicating HIV-like particle with heterologous,  
 PT antigenic anchor sequence.  
 XX  
 PS Disclosure; Col 17; 28pp; English.  
 XX  
 CC The invention relates to a method for determining the presence of  
 CC antibodies specifically reactive with HIV retroviral antigens in a  
 CC sample. This involves contacting a sample suspected of containing HIV-  
 CC specific antibodies with a non-infectious, non-replicating, immunogenic  
 CC HIV-like particle as an antigen. The antigen comprises an assembly of a  
 CC gag gene product, a pol gene product and a modified env gene product  
 CC containing a non-retroviral heterologous, antigenic, anchor sequence that  
 CC replaces the endogenous anchoring functions of the env gene product. The  
 CC method detects immune complex formation between HIV-specific antibodies  
 CC and the antigens. The method is also useful for identifying antisera  
 CC generated by immunisation with an immunogenic composition capable of  
 CC eliciting HIV-specific immune response. The antigenic marker may comprise  
 CC at least one antigenic epitope from another virus. This sequence  
 CC represents a retrovirus-like particle containing an antigenic marker  
 XX  
 SQ Sequence 21 AA;  
 Query Match 100.0%; Score 77; DB 4; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 0.00012; Mismatches 0; Indels 0; Gaps 0;  
 Matches 15; Conservative 0;  
 QY 1 RIQRGPGRAFTVIGK 15  
 |||||  
 DB 7 RIQRGPGRAFTVIGK 21  
 |||||  
 RESULT 68  
 AAR42153  
 ID AAR42153 standard; peptide; 22 AA.  
 XX  
 AC AAR42153;  
 XX  
 XX 24-OCT-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 27-APR-1994 (first entry)  
 XX  
 DE gp120 V3 loop sequence of HIV-1 IIIB isolate.  
 XX  
 KW Human Immunodeficiency Virus; antigen; ELISA; recombinant antibody;  
 KW HIV-neutralising monoclonal antibody; immunoglobulin; AIDS;  
 KW acquired immune deficiency syndrome; chimeric antibody;  
 KW surface glycoprotein gp120; V3 loop; epitope mapping.  
 XX  
 OS Human immunodeficiency virus 1; (IIIB isolate).  
 XX  
 XX WO9319785-A1.  
 PN  
 XX 14-OCT-1993.  
 FD  
 XX 23-MAR-1993; 93WO-US002629.  
 PF

XX 01-APR-1992; 92US-00861701.  
 PR (MERI ) MERCK & CO INC.  
 XX  
 PA Emimi EA, Conley AJ, Mark GE, Johnson LS, Pfarr DS;  
 PI WPI; 1993-336600/42.  
 XX  
 DR New recombinant human antibody - with HIV neutralising activity against  
 PT at least two isolates, useful for preventing or treating infection in  
 PT diagnosis, etc.  
 XX  
 PS Example 16; Page 100; 154pp; English.  
 XX  
 CC Antibodies able to neutralise more than one HIV-1 isolate are claimed.  
 CC The gp120 V3 loop sequences from different isolates comprising the  
 CC Principal Neutralising Determinant motif GPR are given in AAR42153-  
 CC R42161. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 24-OCT-  
 CC 2003 to standardise OS field)  
 XX  
 SQ Sequence 22 AA;  
 Query Match 100.0%; Score 77; DB 2; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 0.00013; Mismatches 0; Indels 0; Gaps 0;  
 Matches 15; Conservative 0;  
 QY 1 RIQRGPGRAFTVIGK 15  
 |||||  
 DB 6 RIQRGPGRAFTVIGK 20  
 |||||  
 RESULT 69  
 AAR57470  
 ID AAR57470 standard; protein; 22 AA.  
 XX  
 AC AAR57470;  
 XX  
 XX 25-MAR-2003 (revised)  
 DT 21-MAR-1995 (first entry)  
 XX  
 DE HIV BRU V3 loop peptide.  
 XX  
 KW Immunisation; vaccine; therapy; prophylaxis; defective gene;  
 KW non-functional gene; template; antisense; ribozyme; bupivacaine;  
 KW human immunodeficiency virus; acquired immune deficiency syndrome; HIV;  
 KW AIDS; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX WO9416737-A1.  
 PN  
 XX 04-AUG-1994.  
 PD  
 XX 26-JAN-1994; 94WO-US000899.  
 PF  
 XX 26-JAN-1993; 93US-00008342.  
 PR 11-MAR-1993; 93US-00029336.  
 PR 15-JUL-1993; 93US-00093235.  
 PR 21-SEP-1993; 93US-00124962.  
 PR 21-SEP-1993; 93US-00125012.  
 XX  
 XX (WEIN/) WEINER D B.  
 PA (WILL/) WILLIAMS W V.  
 PA (WANG/) WANG B.  
 PA (CONE/) CONEY L R.  
 PA (MERV/) MERVIA M J.  
 PA (ZURA/) ZURAWSKI V R.  
 XX  
 XX Weiner DB, Williams WV, Wang B, Coney LR, Merva MJ, Zurawski VR;  
 PI WPI; 1994-263787/32.  
 DR  
 XX

PT Method for introducing genetic material into cells - utilises  
 PT polynucleotide function enhancer and nucleic acid free of retroviral  
 PT particles, e.g. HIV immunisation.

XX Example 3; Page 44; 136pp; English.

XX A genetic vaccine against HIV contains a DNA construct which comprises  
 CC the sequence encoding gp160. The genetic material was then introduced  
 CC into the cells of an individual by (a) contacting the individual's cells  
 CC with a polynucleotide function enhancer (bupivacaine) and (b)  
 CC administering to the cells the nucleic acid molecule free of retroviral  
 CC particles. Nucleic acid molecules which are delivered to cells may serve  
 CC as genetic templates for proteins that function as prophylactic and/or  
 CC therapeutic immunising agents; replacement copies of defective, missing  
 CC or non-functional genes; genetic templates for therapeutic proteins;  
 CC genetic templates for antisense molecules or as genetic templates for  
 CC ribozymes. This peptide was derived from the V3 loop of an HIV strain (an  
 CC epitope targetted by HIV neutralising antibodies) and was used to  
 CC determine whether the anti-gp160 antibodies elicited in mice immunised  
 CC with the genetic vaccine were reactive with this region. (Updated on 25-  
 CC MAR-2003 to correct PN field.)

XX Sequence 22 AA;

Query Match 100.0%; Score 77; DB 2; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 0.00013;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGPGRAFTVIGK 15  
 |||||  
 Db 8 RIQPGGPGRAFTVIGK 22

RESULT 70

AAW07392  
 ID AAW07392 standard; peptide; 22 AA.

XX AC AAW07392;

XX 16-OCT-2003 (revised)

DT 24-FEB-1997 (first entry)

XX HIV-1 strain IIIB gp120 V3 loop sequence.

XX HIV-1; gp120; V3 loop; common consensus PND domain; envelop; CD4;  
 KW binding site; stem-loop; lysine branched peptide; AIDS.

XX Human immunodeficiency virus 1.

XX JP08231423-A.

XX 10-SEP-1996.

XX 27-FEB-1995; 95JP-00038835.

XX 27-FEB-1995; 95JP-00038835.

XX (TERU ) TERUMO CORP.

XX (OKUD/) OKUDA K.

XX WPI; 1996-461278/46.

XX Novel AIDS vaccine - comprises branched lysine peptide fragments derived  
 PT from HIV env protein.

XX Example 2; Page 5-6; 8pp; Japanese.

XX This is the sequence of the V3 loop of the gp120 envelop protein from HIV  
 CC -1 strain IIIB. The sequence was used with a construct comprising part of  
 CC the HIV-1 gp120 V3 loop common consensus PND sequence (AAW07390) fused to  
 CC part of the HIV-1 CD4 binding site (AAW07391) and with the V3 loop  
 CC sequences from HIV-1 strains Thai B (AAW07393) or HGP-30 (AAW07394) to  
 CC generate a lysine branched peptide which is useful for the prevention and

CC treatment of AIDS. (Updated on 16-OCT-2003 to standardise OS field)  
 XX  
 SQ Sequence 22 AA;

Query Match 100.0%; Score 77; DB 2; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 0.00013;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGPGRAFTVIGK 15  
 |||||  
 Db 7 RIQPGGPGRAFTVIGK 21

RESULT 71

AAW07488

ID AAY07488 standard; peptide; 22 AA.

XX AC AAY07488;

XX 17-OCT-2003 (revised)

DT 17-AUG-1999 (first entry)

XX HIV-1 strain IIIB gp120 V3 loop sequence.

XX Light chain; variable region; human; HIV-1; gp120; monoclonal antibody;  
 KW epitope; V3 loop; heterohybridoma; human immunodeficiency virus-1;  
 KW peripheral blood lymphocyte; Epstein-Barr virus; EBV; AIDS.

XX Human immunodeficiency virus 1.

XX US5914109-A.

XX 22-JUN-1999.

XX 21-NOV-1994; 94US-00345321.

XX 15-JUN-1990; 90US-00538451.

XX 12-APR-1991; 91US-00684090.

XX 23-APR-1992; 92US-00872675.

XX (UWNY ) UNIV NEW YORK STATE.

XX Gorny MK, Zolla-Pazner S;

XX WPI; 1999-370481/31.

XX Heterohybridoma producing human monoclonal antibodies to human  
 PT immunodeficiency virus-1.

XX Example 5; Col 24; 42pp; English.

XX This sequence represents the V3 loop from the gp120 protein of the human  
 CC immunodeficiency virus-1 (HIV-1) strain IIIB. The invention relates to  
 CC the generation of heterohybridomas producing human monoclonal antibodies  
 CC (see AAX9204-X79207) to a neutralising epitope of HIV-1 prepared by  
 CC transforming peripheral blood lymphocytes with Epstein-Barr virus. The  
 CC antibodies can be used to treat someone infected with HIV-1 or suffering  
 CC from AIDS. (Updated on 17-OCT-2003 to standardise OS field)

XX Sequence 22 AA;

Query Match 100.0%; Score 77; DB 2; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 0.00013;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGPGRAFTVIGK 15  
 |||||  
 Db 6 RIQPGGPGRAFTVIGK 20

RESULT 72

AAW85137

ID AAY85137 standard; protein; 22 AA.

XX AAY85137;  
 XX  
 XX 12-SEP-2003 (revised)  
 DT 20-JUN-2000 (first entry)  
 XX  
 XX HIV-1 IIIB V3 loop peptide sequence.  
 DE  
 XX Human immunodeficiency virus type 1; HIV-1; infection; prevent; detect;  
 KW glycoprotein 140; gp140; neutralising antibody; conformational epitope;  
 KW V3 loop.  
 XX  
 XX Human immunodeficiency virus 1.  
 OS  
 XX US6039957-A.  
 PN  
 XX 21-MAR-2000.  
 PD  
 XX 03-MAR-1997; 97US-00805889.  
 PF  
 XX 10-DEC-1993; 93US-00165314.  
 PR  
 XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
 PA  
 XX Doms RW, Moss B, Earl PL, Broder CC;  
 PI WPI; 2000-270121/23.  
 DR  
 XX Producing neutralizing antibodies useful for preventing, treating and  
 PT diagnosing an HIV infection in a mammal comprises administering  
 PT recombinant uncleaved gp140 proteins to a human.  
 XX  
 XX Example 10; Col 12; 15pp; English.  
 PS  
 XX This sequence represents a human immunodeficiency virus type-1 IIIB V3-  
 CC loop peptide sequence. The peptide sequence is used to test the  
 CC reactivity of the antibodies of the invention. The invention relates to a  
 CC method for the production of neutralising antibodies against  
 CC conformational epitopes of HIV-1 envelope proteins in humans. The method  
 CC comprises administering to a human, a recombinant uncleaved gp140 protein  
 CC retaining its oligomeric structure. The human produces neutralising  
 CC antibodies against conformational epitopes of the HIV-1 gp140 protein  
 CC found on the oligomeric structure of the gp140. The anti-HIV-1 gp140  
 CC antibodies of the invention can be used for preventing and diagnosing an  
 CC HIV infection in a mammal. Gp140 antibodies are useful for treating an  
 CC HIV infection. A diagnostic method using the antibodies involves  
 CC isolating a body fluid, preferably blood, and contacting it with a  
 CC labelled monoclonal antibody for gp140, and detecting any bound antibody.  
 CC (Updated on 12-SEP-2003 to standardise OS field)  
 XX  
 XX Sequence 22 AA;  
 SQ  
 Query Match 100.0%; Score 77; DB 3; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 0.00013;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQGGPGRAFTVIGK 15  
 Db |||||  
 8 RIQGGPGRAFTVIGK 22  
 RESULT 73  
 ABU07537  
 ID ABU07537 standard; peptide; 22 AA.  
 XX  
 XX AC ABU07537;  
 XX  
 XX 23-OCT-2003 (revised)  
 DT 13-MAR-2003 (first entry)  
 XX  
 XX Human N-acetylgalactosaminyl transferase T4, Galnac T4, substrate #9.  
 DE  
 XX Galnac T4; N-acetylgalactosaminyl transferase T4; acceptor substrate;  
 KW

glycosylation; mucin 1; MUC1; vaccine; antiinflammatory; Galnac-T1;  
 Galnac-T2; Galnac-T3; HIV.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 XX FH Location/Qualifiers  
 FT Modified-site 1  
 FT /label= OTHER  
 FT /note= "Gln is acetylated"  
 XX  
 XX US6465220-B1.  
 FN  
 XX 15-OCT-2002.  
 PD  
 XX 21-DEC-1998; 98US-00217306.  
 PF  
 XX 21-DEC-1998; 98US-00217306.  
 PR  
 XX (GLYC-) GLYCOZYM APS.  
 PA  
 XX Hassan FH, Clausen H, Bennett EP, Eisenkraetzer D, Gaetgens J;  
 PI WPI; 2003-147066/14.  
 DR  
 XX Glycosylating MUC1 acceptor substrate, by glycosylating substrate with N-  
 CC acetyl-galactosaminyltransferase T1, Galnac-T2 or Galnac-T3, then with  
 CC human Galnac-T4 to glycosylate specific Ser, Thr residues in substrate.  
 CC  
 XX Example 6; Col 9; 10pp; English.  
 PS  
 XX The invention relates to glycosylating a MUC1 (mucin 1) acceptor  
 CC substrate, comprising glycosylating the substrate with enzymatically  
 CC active N-acetylgalactosaminyltransferase (Galnac)-T1, Galnac-T2 or Galnac  
 CC -T3, or with Galnac capable of glycosylating MUC1 glycosylation sites  
 CC that can be glycosylated by Galnac-T1, Galnac-T2 or Galnac-T3, and  
 CC glycosylating the substrate with enzymatically active human Galnac-T4 to  
 CC glycosylate specific Ser, Thr positions in the MUC1 substrate. The method  
 CC is used for glycosylating an MUC1 acceptor substrate. The glycosylated  
 CC substrates are useful in preparation of vaccines and antiinflammatory  
 CC agents. Galnac-T4 exhibits a different substrate specificity than  
 CC previously characterised Galnac transferases. The activity of Galnac-T4  
 CC is unique and specific to glycosylate specific serine and threonine  
 CC residues in MUC1 tandem repeat. The present sequence is an acceptor  
 CC substrate peptide used to test the substrate specificity the human Galnac  
 CC T4 protein, HIVH1Bgp120. (Updated on 23-OCT-2003 to standardise OS field)  
 XX  
 XX Sequence 22 AA;  
 SQ  
 Query Match 100.0%; Score 77; DB 6; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 0.00013;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQGGPGRAFTVIGK 15  
 Db |||||  
 3 RIQGGPGRAFTVIGK 17  
 RESULT 74  
 AAR04502  
 ID AAR04502 standard; protein; 23 AA.  
 XX  
 XX AC AAR04502;  
 XX  
 XX 09-SEP-2004 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 20-SEP-1990 (first entry)  
 XX  
 XX Cpd. eliciting, binding with neutralising antibodies to HIV variants.  
 DE  
 XX HIV; therapy; AIDS; principal neutralising domain; antibodies; diagnosis;  
 KW prophylaxis.  
 KW  
 XX Synthetic.  
 OS

XX PN W09003984-A.  
 XX PD 19-APR-1990.  
 XX PF 03-OCT-1988; 88US-00252949.  
 XX PR 03-OCT-1988; 88US-00252949.  
 XX PR 01-JUN-1989; 89US-00359543.  
 XX PR 19-SEP-1989; 89US-00407663.  
 XX PA (REPK ) REPLIGEN CORP.  
 XX PI Rusche JR, Putney SD, Javaherian K, Farley J, Grimalia R;  
 PI Lynn DU, Petrobre J;  
 XX DR WPI; 1990-147824/19.  
 XX PT Principal neutralising domain of HIV variants - used for producing  
 PT peptide(s) and antibodies for diagnosis, prophylaxis and/or therapy  
 PT therapy of HIV infection.  
 XX PS Claim 27 (d); Page 84; 108pp; English.  
 XX CC Either the N-terminal (a) or C-terminal (b), but not both, may be omitted  
 CC ; either (a) or (b) may comprise any of the following: cysteine, a  
 CC protein or other moiety capable of enhancing immunogenicity, a peptide  
 CC from an HIV principal neutralising domain, peptide capable of stimulating  
 CC T-cells, or general immune stimulant. See also AAR04427-R04506 and  
 CC AAR04273-004279. (Updated on 25-MAR-2003 to correct PR field.) (Updated  
 CC on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to correct  
 CC PI field.)  
 CC CC  
 CC CC  
 CC CC  
 CC SQ Sequence 23 AA;  
 Query Match 100.0%; Score 77; DB 2; Length 23;  
 Best Local Similarity 100.0%; Pred. No. 0.00013;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQPGPGRAFTVIGK 15  
 DB 7 RIQPGPGRAFTVIGK 21  
 RESULT 75  
 AAB66704  
 ID AAB66704 standard; peptide; 23 AA.  
 XX AC AAB66704;  
 XX DT 11-SEP-2003 (revised)  
 XX DT 09-APR-2001 (first entry)  
 XX DE HIV-1 IIB V3-loop peptide.  
 XX KW HIV; Human immunodeficiency virus; immune; ss.  
 XX OS Human immunodeficiency virus 1.  
 XX PN US6171596-B1.  
 XX PD 09-JAN-2001.  
 XX PF 30-APR-1998; 98US-00070291.  
 XX PR 10-DEC-1993; 93US-00165314.  
 XX PR 03-MAR-1997; 97US-00805889.  
 XX PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
 XX PI Earl PL, Broder CC, Doms RW, Moss B;

XX DR WPI; 2001-167730/17.  
 XX PT Immunogenic composition for stimulating mammalian immune response,  
 PT comprises recombinant uncleaved gp140 protein retaining its oligomeric  
 PT structure such that antibodies against HIV envelope proteins are  
 PT produced.  
 XX PS Example 10; Col 13; 24pp; English.  
 XX CC The present invention relates to an immunogenic composition comprising a  
 CC recombinant uncleaved gp140 protein which is a C-terminally truncated  
 CC form of HIV-1 gp160 protein, missing the gp41 transmembrane domain, and  
 CC retaining its oligomeric structure, such that neutralizing antibodies  
 CC against conformational epitopes of HIV-1 envelope proteins found on the  
 CC oligomeric structure of are produced in an immunized human. The invention  
 CC is useful for stimulating an anti-HIV-1 env immune response in a mammal,  
 CC by stimulating the formation of neutralizing antibodies against  
 CC conformational epitopes of HIV-1 env protein in a mammal. gp140 is also  
 CC useful for preventing HIV infection in a mammal. (Updated on 11-SEP-2003  
 CC to standardise OS field)  
 XX SQ Sequence 23 AA;  
 Query Match 100.0%; Score 77; DB 4; Length 23;  
 Best Local Similarity 100.0%; Pred. No. 0.00013;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQPGPGRAFTVIGK 15  
 DB 9 RIQPGPGRAFTVIGK 23  
 RESULT 76  
 AAR06211  
 ID AAR06211 standard; peptide; 24 AA.  
 XX AC AAR06211;  
 XX DT 10-DEC-1990 (first entry)  
 XX DE Immunosuppressant protease inhibitor.  
 XX KW Organ transplant; autoimmune disease; allergy; aplastic anaemia;  
 KW systemic erythematodes.  
 XX OS Synthetic.  
 XX PN JP02157229-A.  
 XX PD 18-JUN-1990.  
 XX PF 07-DEC-1988; 88JP-00310635.  
 XX PR 07-DEC-1988; 88JP-00310635.  
 XX PA (NITL ) NITTO DENKO CORP.  
 XX DR WPI; 1990-233739/31.  
 XX PT Protease inhibiting peptide immuno-suppressant - used to suppress  
 PT rejection reaction in organs transplantation.  
 XX PS Claim 1; Page 181; 6pp; Japanese.  
 XX CC Protease inhibitor may be used to suppress organ transplant rejection  
 CC without serious side effects. It may also be used in prevention and  
 CC therapy of allergy, aplastic anaemia and systemic erythematodes. See  
 CC also AAR06212  
 XX SQ Sequence 24 AA;  
 Query Match 100.0%; Score 77; DB 2; Length 24;

Best Local Similarity 100.0%; Pred. No. 0.00014; Mismatches 0; Indels 0; Gaps 0;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGPAFTVIGK 15  
 DB 8 RIQPGGPAFTVIGK 22

RESULT 77  
 AAR07018  
 ID AAR07018 standard; peptide; 24 AA.  
 AC AAR07018;  
 XX  
 XX 24-OCT-2003 (revised)  
 DT 18-JAN-1991 (first entry)  
 XX  
 XX Residues 301-324 of HIV gp 120 protein used in isolation of sulphated  
 DE polysaccharide by affinity chromatography.  
 XX  
 XX HIV; AIDS; ARC; gp120; RP135.  
 KW  
 XX  
 XX Human immunodeficiency virus 1.  
 OS  
 XX  
 XX CA2007258-A.  
 FN  
 XX  
 XX 11-JUL-1990.  
 PD  
 XX  
 XX 05-JAN-1990; 90CA-02007258.  
 PF  
 XX  
 XX 11-JAN-1989; 89US-00295856.  
 PR  
 XX 05-JUL-1989; 89US-00375795.  
 PR  
 XX  
 XX (RICH ) MERRELL DOW PHARM INC.  
 PA  
 XX  
 XX Cardin AD, Jackson RL;  
 PI  
 XX  
 XX WPI; 1990-290631/39.  
 DR  
 XX  
 XX Prepn. of anti-HIV sulphated polysaccharide - by affinity chromatography  
 PT using a resin-bound peptide corresp. to a HIV gp. 120 fragment.  
 PT  
 XX  
 XX Disclosure; Page ?; 34pp; English.  
 PS  
 XX  
 XX Anti-HIV sulphated polysaccharide (SPS) can prevent syncytium formation  
 CC in HIV infected C4 cells. SPS may be isolated by affinity chromatography  
 CC with the given resin bound peptide fragment RP135. (Updated on 24-OCT-  
 CC 2003 to standardise OS field)  
 CC  
 XX  
 XX Sequence 24 AA;

Query Match 100.0%; Score 77; DB 2; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGPAFTVIGK 15  
 DB 8 RIQPGGPAFTVIGK 22

RESULT 78  
 AAR26565  
 ID AAR26565 standard; peptide; 24 AA.  
 AC AAR26565;  
 XX  
 XX 24-OCT-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 28-JAN-1993 (first entry)  
 XX  
 XX Sequence of peptide DB1 determined from the V3 principal neutralising  
 DE domain (PND) region of HIV-1 strain HTLV-III B.  
 XX

Diagnostic; assay; detection; AIDS; human immunodeficiency virus.  
 Human immunodeficiency virus 1; strain HTLV-III B.  
 WO9213882-A1.  
 20-AUG-1992.  
 29-JAN-1992; 92WO-EP000187.  
 30-JAN-1991; 91IT-MI000220.  
 (SUPE-) INST SUPERIORE DI SANITA.  
 (CNDR ) CONSIGLIO NAZ DELLE RICERCHE.  
 De Rossi A, Pasti M, Mammano F, Panozzo M, Dettin M, Di Bello C;  
 Chieco-Bianchi L;  
 WPI; 1992-299983/36.  
 Synthetic peptide(s) which enhance infectivity of HIV-1 in cellular  
 cultures - are used for determining HIV-1 virus in blood and other  
 biological materials.  
 Claim 1; Page 17; 31pp; English.  
 The principal neutralizing domain (PND) of HIV-1 corresp. to a 24- amino  
 acid sequence arranged in a loop determined by a disulfide bridge in the  
 third hypervariable region, V3, of the protein gp 120. The central  
 portion of the V3-PND contains a sequence which is highly conserved in  
 different HIV-1 isolated strains, whereas the amino acids flanking this  
 sequence are variable. The antigenic properties of V3 region are known to  
 be virus-specific; antibodies elicited by MN-derived peptide do not  
 neutralize HTLV-III B virus and vice-versa. (Updated on 25-MAR-2003 to  
 correct PN field.) (Updated on 25-MAR-2003 to correct PR field.) (Updated  
 on 25-MAR-2003 to correct PA field.) (Updated on 24-OCT-2003 to  
 standardise OS field)  
 XX  
 XX Sequence 24 AA;

Query Match 100.0%; Score 77; DB 2; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGPAFTVIGK 15  
 DB 8 RIQPGGPAFTVIGK 22

RESULT 79  
 AAR29233  
 ID AAR29233 standard; peptide; 24 AA.  
 AC AAR29233;  
 XX  
 XX 25-MAR-2003 (revised)  
 DT 14-APR-1993 (first entry)  
 XX  
 XX Heteroconjugate antibody immunogen RP135 (IIIB).  
 XX  
 XX V3 loop; gp41; envelope protein; MN; prototype; virus; variant; HIV;  
 KW homology; heteroconjugate; enzyme; epitope mapping; replication;  
 KW conjugate; immunogenic carrier; keyhole limpet hemocyanin; KLH;  
 KW ovalbumin; succinyl maleimidomethyl cyclohexanecarboxylate; SMCC.  
 XX  
 XX Synthetic.  
 OS  
 XX  
 XX Key Location/Qualifiers  
 FH Misc-difference 24  
 FT /note= "Not in the natural sequence of this isolate"  
 XX  
 XX WO9220373-A1.  
 XX



PD 26-NOV-1992.  
 XX  
 PF 29-APR-1992; 92WO-US003616.  
 XX  
 PR 14-MAY-1991; 91US-00699773.  
 XX  
 PA (REPK ) REPLIGEN CORP.  
 XX  
 PI Higgins PJ, Potts BJ;  
 XX  
 XX WPI; 1992-415475/50.  
 DR  
 XX Hetero-conjugate antibodies for treating HIV infections - comprise an  
 XX antibody specific for an effector cell surface antigen and an antibody to  
 PT a V3 loop of Gp-120 envelope protein of HIV.  
 XX  
 XX Disclosure; Page 19; 69pp; English.  
 PS  
 XX The sequences given in AAR29226-35 represent peptides which were used as  
 CC immunogens for the production of antibodies against HIV. These peptides  
 CC may be either unconjugated or conjugated to an immunogenic carrier, eg. a  
 CC keyhole limpet hemocyanin (KLH) or ovalbumin, using succinyl  
 CC maleimidomethyl cyclohexanecarboxylate (SMCC) as a conjugating agent.  
 CC Viruses containing these or similar sequences may be recognised by the  
 CC heteroconjugate enzymes of the invention. The antibodies raised against  
 CC these sequences may be identified by standard epitope mapping techniques.  
 CC These antibodies are capable, even at low concentrations, of nearly  
 CC eliminating viral replication of different strains of HIV. (Updated on 25  
 CC -MAR-2003 to correct PN field.)  
 XX  
 SQ Sequence 24 AA;  
 Query Match 100.0%; Score 77; DB 2; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQRGPGRAFTVIGK 15  
 |||||  
 DB 8 RIQRGPGRAFTVIGK 22  
 RESULT 80  
 AAR26870  
 ID AAR26870 standard; peptide; 24 AA.  
 AC AAR26870;  
 XX  
 XX 25-MAR-2003 (revised)  
 DT 20-MAY-1998 (first entry)  
 XX  
 XX HIV gp120 V3 region binding assay peptide IIIB.  
 DE  
 XX Human immunodeficiency virus; AIDS; anti-gp120 antibodies.  
 KW  
 XX Synthetic.  
 OS  
 XX EP503916-A1.  
 PN  
 XX 16-SEP-1992.  
 PD  
 XX 11-MAR-1992; 92EP-00302064.  
 PF  
 XX 11-MAR-1991; 91US-00668266.  
 PR  
 PR 06-MAR-1992; 92US-00894766.  
 XX  
 XX (IDEC-) IDEC PHARM CORP.  
 XX  
 XX Chang-Yuil K;  
 PI  
 XX WPI; 1992-309988/38.  
 DR  
 XX Anti-idiotypic antibodies and methods for their selection - useful as  
 PT vaccines for the prevention and treatment of HIV infection.

XX Example; Page 9; 30pp; Japanese.  
 PS  
 CC The sequence is that of peptide IIIB, derived from the V3 region of HIV  
 CC gp120. It was used in binding assays for anti-gp120 antibodies. The anti-  
 CC gp120 antibodies are useful in vaccine formulations for the treatment or  
 CC prevention of HIV infection. See also AAR26867-R26873. (Updated on 25-MAR  
 CC -2003 to correct PN field.) (Updated on 25-MAR-2003 to correct PR field.)  
 XX  
 SQ Sequence 24 AA;  
 Query Match 100.0%; Score 77; DB 2; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQRGPGRAFTVIGK 15  
 |||||  
 DB 8 RIQRGPGRAFTVIGK 22  
 RESULT 81  
 AAR32406  
 ID AAR32406 standard; peptide; 24 AA.  
 XX  
 AC AAR32406;  
 XX  
 XX 25-MAR-2003 (revised)  
 DT 04-JUL-1993 (first entry)  
 XX  
 XX Sequence of peptide B1 which comprises AAs 308-331 from the V3 region of  
 DE HIV-1 isolate IIIB.  
 DE  
 XX HIV-1; vaccine; dendritic core; ss.  
 KW  
 XX Synthetic.  
 OS  
 XX WO9303766-A1.  
 PN  
 XX 04-MAR-1993.  
 PD  
 XX 11-AUG-1992; 92WO-US006688.  
 PF  
 XX 13-AUG-1991; 91US-00744281.  
 PR  
 XX (REPK ) REPLIGEN CORP.  
 PA (UYRQ ) UNIV ROCKEFELLER.  
 XX  
 XX Tam JP, Profy AT;  
 PI  
 XX WPI; 1993-093730/11.  
 DR  
 XX New multiple antigen peptide(s) as HIV vaccines - include a dendritic  
 PT core covalently bonded to peptide including the sequence IGPGR.  
 XX  
 PS Example; Fig 1; 35pp; English.  
 XX  
 CC Nine peptides from the V3 regions of HIV-1 isolates IIIB, RF and MN were  
 CC incorporated into tetraivalent multiple antigen peptide systems (MAPS)  
 CC (see AAR32406-14). Parallel groups of three peptides with chain lengths  
 CC spanning from 11-24 residues were synthesised in MAPS format for each  
 CC isolate. ELIS assays demonstrated that antisera titers in mice were  
 CC closely related to the length of the IIIB peptide used for the  
 CC immunisation - the longer the stronger the response. There was no  
 CC substantial antibody prodn. in mice against the other two series of  
 CC peptides, RF (B4-B6), and MN (B7-B9), except for a low reactivity in the  
 CC gp. immunised with B8 (MN isolate). Specificity tests of the B cell  
 CC response demonstrated that the T cell epitope (AAR32415) also serves as a  
 CC B cell epitope. (Updated on 25-MAR-2003 to correct PN field.)  
 XX  
 SQ Sequence 24 AA;  
 Query Match 100.0%; Score 77; DB 2; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15  
 |||||  
 Db 8 RIQRGPGRAFTVIGK 22

RESULT 82  
 AAR33190  
 ID AAR33190 standard; peptide; 24 AA.  
 AC AAR33190;  
 XX  
 XX 25-MAR-2003 (revised)  
 DT 11-JUL-1993 (first entry)  
 XX  
 XX Sequence of HIV-1 derived V3 loop peptide.  
 DE  
 XX AIDS; HIV; therapy; autoimmune disease; gp120; ss.  
 KW  
 XX Synthetic.  
 OS  
 XX WO9303762-A1.  
 PN  
 XX 04-MAR-1993.  
 PD  
 XX 10-AUG-1992; 92WO-AU000423.  
 PF  
 XX 13-AUG-1991; 91AU-00007725.  
 PR  
 XX (BIOT-) BIOTECH AUSTRALIA PTY LTD.  
 PA (SVIN-) ST VINCENT'S HOSPITAL SYDNEY LTD.  
 XX  
 XX Geczy AF, Russell-Jones GU, Bell SJD, Cooper DA;  
 PI WPI; 1993-093727/11.  
 DR  
 XX Compens. contg. E.coli outer membrane proteins TraT, OmpA or OmpF -  
 PT increase immune response and are used for treating autoimmune diseases,  
 PT AIDS, cancer etc.  
 XX  
 PS Example; Page 13; 36pp; English.  
 XX  
 CC Two peptides, gp41[8] and V3 loop derived from the gp120 region of HIV-1  
 CC were synthesised and purified. To improve the solubility of the gp41[8]  
 CC peptide the sequence RSS was added to the amino terminal to produce  
 CC peptide R-S-Sgp41[8]. The immunodominant HIV-derived peptides were used to  
 CC ascertain whether E.coli outer membrane protein TraT augments the in  
 CC vitro T-cell proliferative responses. (Updated on 25-MAR-2003 to correct  
 CC PN field.)  
 XX  
 SQ Sequence 24 AA;

Query Match 100.0%; Score 77; DB 2; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15  
 |||||  
 Db 7 RIQRGPGRAFTVIGK 21

RESULT 83  
 AAR38165  
 ID AAR38165 standard; peptide; 24 AA.  
 AC AAR38165;  
 XX  
 XX 27-AUG-2003. (revised)  
 DT 25-MAR-2003 (revised)  
 DT 12-OCT-1993 (first entry)  
 XX  
 DE V3 loop peptide N24G.

Query Match 100.0%; Score 77; DB 2; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15  
 |||||  
 Db 7 RIQRGPGRAFTVIGK 21

RESULT 84  
 AAR44191  
 ID AAR44191 standard; peptide; 24 AA.  
 AC AAR44191;  
 XX  
 XX 25-MAR-2003 (revised)  
 DT 20-MAY-1994 (first entry)  
 XX  
 XX gp120 V3 loop antigen B2 and lipophilic membrane anchoring group.  
 XX Antigen; B2; third variable domain; V3 loop; gp120; HIV-1; vaccine;  
 KW strain IIIB; multiple antigenic peptide system; dendritic core;  
 KW lipophilic membrane anchoring group; mammal; humoral; immunisation;  
 KW cytotoxic T cell; CT; immune response; infection; Freund's adjuvant;  
 KW pathogen; HIV; influenza; malaria.  
 XX Human immunodeficiency virus 1.  
 OS Synthetic.  
 OS  
 XX Key Location/Qualifiers  
 FH Peptide 1..18  
 FT Peptide /label= B2 antigenic peptide  
 FT Peptide 19..24

XX  
 KW gp120; HIV-1; cytotoxic T-lymphocyte; CTL; T-helper; AIDS; infection.  
 XX Human immunodeficiency virus 1.  
 OS WO9310816-A1.  
 PN  
 XX 10-JUN-1993.  
 PD  
 XX 02-DEC-1992; 92WO-US010378.  
 PF  
 XX 02-DEC-1991; 91US-00800932.  
 PR 16-SEP-1992; 92US-00945865.  
 XX (TEXA) UNIV TEXAS SYSTEM.  
 PA  
 XX Sastry JK, Arlinghaus RB, Platsoucas CD, Nehete PN;  
 PI WPI; 1993-196739/24.  
 DR  
 XX Peptide composition for treating and preventing viral infections -  
 PT comprise CTL-inducing epitope and HIV infection-inhibiting sequence or T  
 PT helper cell-inducing sequence.  
 XX  
 PS Claim 19; Page 95; 130pp; English.  
 XX  
 CC HIV gp120 V3 loop-derived peptides (AAR38170-87) are successful in  
 CC generating CTL responses, esp. peptide R15K (AAR38187); the T-helper cell  
 CC -inducing peptide includes the sequence C15A (AAR38164); HIV infection-  
 CC inhibiting peptides are given in AAR38188-206, and are esp. peptides  
 CC R15K, N24G, E13V, R8K, T13Q and H13N (AAR38165-69). The peptides may also  
 CC be derived from an influenza virus protein or a sendai virus protein  
 CC (AAR41014-15). It was observed that peptide N24G (amino acids 308-311),  
 CC with sequences derived from the V3 loop of HIV-1 IIIB, inhibits HIV-1,  
 CC infection of primary human T cells by 92% at 1 microg/ml (ca. 0.4-0.6  
 CC microm). (Updated on 25-MAR-2003 to correct PN field.) (Updated on 27-AUG  
 CC -2003 to correct OS field.)  
 XX  
 SQ Sequence 24 AA;

Query Match 100.0%; Score 77; DB 2; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15  
 |||||  
 Db 8 RIQRGPGRAFTVIGK 22

FT /note= "Lipophilic membrane anchoring group"

PN WO9322343-A1.

PD 11-NOV-1993.

XX 03-MAY-1993; 93WO-US004179.

XX 01-MAY-1992; 92US-00877613.

PA (UVRQ ) UNIV ROCKEFELLER.

XX Tam JP;

XX WPI; 1993-368723/46.

XX New multiple antigen system esp. for use in HIV vaccines - contains  
PT lipophilic membrane anchor imparting adjuvant activity, and peptide  
PT antigens coupled to dendritic core.

XX Disclosure; Fig 8; 55pp; English.

XX The sequence given in AAR44190 is a peptide antigen, B2, which represents  
CC residues 312-329 of the third variable domain (V3 loop) of gp120, of HIV-  
CC 1 strain IIB. This sequence was attached to an amino acid linker (see  
CC also AAR44191) in the production of a multiple antigenic peptide system.  
CC This system comprises a dendritic core to which are covalently attached  
CC at least one peptide, eg, an antigenic peptide, and a lipophilic membrane  
CC anchoring group. This system may be injected into a mammal and elicits  
CC both humoral and cytotoxic T cell (CTL) immune responses. This system may  
CC be used to immunise against HIV infection. The lipophilic membrane  
CC anchoring group provides efficient adjuvant activity without the toxicity  
CC problems of Freund's adjuvant, while the dendritic structure allows  
CC multiple antigens to be attached. Optionally the antigens may be derived  
CC from different pathogens, providing vaccines which protect against more  
CC than one disease, eg, HIV, influenza and malaria. (Updated on 25-MAR-2003  
CC to correct PN field.)

XX Sequence 24 AA;

Query Match 100.0%; Score 77; DB 2; Length 24;

Best Local Similarity 100.0%; Pred. No. 0.00014; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGPGRFAFTIGK 15

Db 4 RIQGPGRFAFTIGK 18

RESULT 85

ID AAR63821 standard; peptide; 24 AA.

AC AAR63821;

DT 16-OCT-2003 (revised)

DT 25-MAR-2003 (revised)

DT 29-JUN-1995 (first entry)

XX HIV-1 gp120-24 epitope amino acids 307-330.

XX Human immunodeficiency virus type 1; HIV-1; gp120 epitopes; vaccines;

KW HIV neutralising antibodies.

XX Human immunodeficiency virus 1.

OS WO9423746-A1.

PN 27-OCT-1994.

XX 15-APR-1994; 94WO-SE000340.

XX 16-APR-1993; 93US-00048976.

XX (SYNT-) SYNTELLO VACCINE DEV AB.

XX Vahlne A, Svennerholm B, Rymo L, Jeansson S, Horal P;

XX WPI; 1994-341488/42.

XX New peptide(s) comprising HIV gp120 epitope(s) - for prodn. of vaccines  
PT against HIV infections.

XX Claim 1; Page 18; 77pp; English.

XX AAR63809-R63849 are epitopes from the human immunodeficiency virus type 1  
CC (HIV-1) gp120, by binding one or more of these epitopes to a carrier a  
CC HIV vaccine is produced. These vaccines can elicit the production of HIV-  
CC neutralising antibodies in monkeys, and therefore may be used to prevent  
CC HIV infections, and to lighten the immune response in HIV infected  
CC humans. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 16-OCT-  
CC 2003 to standardise OS field)

XX Sequence 24 AA;

Query Match 100.0%; Score 77; DB 2; Length 24;

Best Local Similarity 100.0%; Pred. No. 0.00014; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGPGRFAFTIGK 15

Db 2 RIQGPGRFAFTIGK 16

RESULT 86

AAR67414

ID AAR67414 standard; peptide; 24 AA.

XX AAR67414;

XX 25-JAN-1999 (first entry)

XX HIV-1 peptide epitope BRU.

XX Immunogen; vaccine; HIV-1; T-cell; B-cell; epitope; core protein; gp120;  
KW V3 loop.

XX Synthetic.

OS Human immunodeficiency virus 1.

XX US5817754-A.

XX 06-OCT-1998.

XX 05-JUN-1995; 95US-00464329.

XX 09-JUN-1993; 93US-00073378.

XX 09-JUN-1994; 94US-00257528.

XX (CONN-) CONNAUGHT LAB LTD.

XX Chong P, Klein MH, Sia CDY;

XX WPI; 1998-556461/47.

XX Synthetic human immunodeficiency virus-1 peptide(s) - containing T-cell  
PT epitope and B-cell epitope(s) are candidate vaccines against HIV-1.

XX Disclosure; Fig 3; 40pp; English.

XX The invention relates to a novel immunogenic composition for use in  
CC vaccines for the treatment of HIV-1 comprising an HIV-1-derived T-cell  
CC epitope linked to an HIV-1-derived B-cell epitope. The T-cell epitopes  
CC are generally designed based on the p24 core protein and the B-cell  
CC epitopes from the V3 loop of the gp120 protein from various HIV-1  
CC strains. This sequence corresponds to an HIV-1 B-cell peptide epitope

CC used to immunise a guinea pig  
 XX Sequence 24 AA;  
 SQ

Query Match 100.0%; Score 77; DB 2; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15  
 |||||

Db 7 RIQRGPGRAFTVIGK 21  
 |||||

RESULT 87

AAW98904

ID AAW98904 standard; peptide; 24 AA.

AC AAW98904;

XX 05-MAY-1999 (first entry)

DE HIV-1 vaccine synthetic peptide SEQ ID NO:99.

KW HIV-1; human immunodeficiency virus; vaccine; T-cell epitope;  
 KW gag protein; B-cell epitope; gp41 protein; chimeric; infection.

XX Synthetic.

OS Human immunodeficiency virus 1.

XX US5876731-A.

XX 02-MAR-1999.

XX 05-JUN-1995; 95US-00462507.

PR 09-JUN-1993; 93US-00073378.

PR 09-JUN-1994; 94US-00257528.

XX (CONN-) CONNAUGHT LAB LTD.

PI Chong P, Klein MH, Sia CDY;

XX WPI; 1999-189590/16.

DR Synthetic chimeric HIV polypeptides - comprising gag protein T-cell  
 PT epitope linked to gp41 B-cell epitope.

XX Example 1; Col 71-72; 41pp; English.

XX The present invention describes a synthetic peptide comprising an amino  
 CC acid sequence containing a T-cell epitope of an HIV gag protein linked at  
 CC its C terminus to an amino acid sequence containing a B-cell epitope of  
 CC an HIV gp41 protein and containing the amino acid sequence: XILKDWX2;  
 CC where X1 = E, A, G or Q, and X2 = A or T, or an amino acid sequence  
 CC capable of eliciting an HIV-specific antiserum and recognizing the  
 CC sequence XILKDWX2. The synthetic peptide is useful in vaccines against  
 CC HIV infection and in diagnostic applications. AAW98892 to AAW98906, and  
 CC AAW98989 to AAW99989 represent synthetic peptides from the present  
 CC invention

XX Sequence 24 AA;

Query Match 100.0%; Score 77; DB 2; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15  
 |||||

Db 7 RIQRGPGRAFTVIGK 21  
 |||||

RESULT 88

AAW22581

ID AAY22581 standard; peptide; 24 AA.

XX AAY22581;

XX 17-OCT-2003 (revised)

DT 19-OCT-1999 (first entry)

XX HIV LDL binding peptide, sequence A.

DE HIV; LDL; low density lipoprotein; human; immune response; infection;  
 KW immunodeficiency; neoplastic tissue; myalgic encephalomyelitis; ME;  
 KW viral infection fatigue syndrome; tuberculosis; hepatitis; AIDS; ARC;  
 KW acquired immunodeficiency syndrome; AIDS related complex;  
 KW HIV-infected CD4 cell; immunosuppressive peptide.

XX Human immunodeficiency virus 1.

OS WO9938524-A2.

XX 05-AUG-1999.

XX 28-JAN-1999; 99WO-IB000149.

XX 29-JAN-1998; 98US-0072980P.

XX (PREN/) PRENDERGAST P T.

XX Prendergast PT;

XX WPI; 1999-494040/41.

XX Enhancing the immune response using a recombinant human low-density  
 PT lipoprotein receptor, useful for treating viral infections, especially  
 PT human immunodeficiency virus (HIV) infection.

XX Claim 7; Page 19; 24pp; English.

XX This sequence represents a HIV sequence that binds human low density  
 CC lipoprotein (LDL), and is designated sequence "A". The invention relates  
 CC to a method for enhancing the immune response in a patient with a  
 CC condition, selected from immunodeficiency (due to a viral, bacterial,  
 CC mycoplasmic, fungal or parasitic infection, or from the growth of  
 CC neoplastic tissue), myalgic encephalomyelitis (ME), post inoculation or  
 CC viral infection fatigue syndrome, tuberculosis, or hepatitis. The method  
 CC comprises using a pharmaceutical composition, comprising a recombinant  
 CC human LDL receptor or a mimic molecule to the cysteine rich domain of LDL  
 CC receptor. The human recombinant LDL receptor forms pharmaceutical  
 CC compositions for: the treatment of acquired immunodeficiency syndrome  
 CC (AIDS) or ARC (AIDS related complex); reducing syncytium formation in HIV  
 CC -infected CD4 cells; treating blood or body fluid or organs to  
 CC neutralise/remove immunosuppressive peptides and/or viruses; or treating  
 CC hepatitis A, B or C. The pharmaceutical compositions also treat a viral  
 CC infection in a human or animal host. The human recombinant LDL receptor  
 CC is also useful for manufacturing medicaments for treating all the  
 CC conditions given above. The human recombinant LDL receptor is a highly  
 CC specific inhibitor of HIV-1 replication in vitro. (Updated on 17-OCT-2003  
 CC to standardise OS field)

XX Sequence 24 AA;

Query Match 100.0%; Score 77; DB 2; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15  
 |||||

Db 8 RIQRGPGRAFTVIGK 22  
 |||||

RESULT 89

AAW22583

ID AAY22583 standard; peptide; 24 AA.

XX

```

AC AAY22583;
XX
DT 17-OCT-2003 (revised)
DT 19-OCT-1999 (first entry)
XX
DE HIV LDL binding peptide, sequence "A" variant.
XX
KW HIV; LDL; low density lipoprotein; human; immune response; infection;
KW immunodeficiency; neoplastic tissue; myalgic encephalomyelitis; ME;
KW viral infection fatigue syndrome; tuberculosis; hepatitis; AIDS; ARC;
KW acquired immunodeficiency syndrome; AIDS related complex;
KW HIV-infected CD4 cell; immunosuppressive peptide.
XX
OS Human immunodeficiency virus 1.
XX
PN WO9938524-A2.
XX
PD 05-AUG-1999.
XX
PF 28-JAN-1999; 99WO-IB000149.
XX
PR 29-JAN-1998; 98US-0072980P.
XX
PA (PREN/) PRENDERGAST P T.
XX
PI Prendergast PT;
XX
DR WPI; 1999-494040/41.
XX
PT Enhancing the immune response using a recombinant human low-density
PT lipoprotein receptor, useful for treating viral infections, especially
PT human immunodeficiency virus (HIV) infection.
XX
PS Disclosure; Page 12; 24pp; English.
XX
CC This sequence represents a variant of the HIV sequence that binds human
CC low density lipoprotein (LDL), and is designated sequence "A" (see
CC AAY22581). The sequence "A" peptide is isolated from HIV isolate
CC IIB(BH10), and this sequence was isolated from HIV isolate IIB(BH8).
CC The invention relates to a method for enhancing the immune response in a
CC patient with a condition, selected from immunodeficiency (due to a viral,
CC bacterial, mycoplasmic, fungal or parasitic infection, or from the growth
CC of neoplastic tissue), myalgic encephalomyelitis (ME), post inoculation
CC or viral infection fatigue syndrome, tuberculosis, or hepatitis. The
CC method comprises using a pharmaceutical composition, comprising a
CC recombinant human LDL receptor or a mimic molecule to the cysteine rich
CC domain of LDL receptor. The human recombinant LDL receptor forms
CC pharmaceutical compositions for: the treatment of acquired
CC immunodeficiency syndrome (AIDS) or ARC (AIDS related complex); reducing
CC syncytium formation in HIV-infected CD4 cells; treating blood or body
CC fluids or organs to neutralise/remove immunosuppressive peptides and/or
CC viruses; or treating hepatitis A, B or C. The pharmaceutical compositions
CC also treat a viral infection in a human or animal host. The human
CC recombinant LDL receptor is also useful for manufacturing medicaments for
CC treating all the conditions given above. The human recombinant LDL
CC receptor is a highly specific inhibitor of HIV-1 replication in vitro.
XX (Updated on 17-OCT-2003 to standardise OS field)
XX
SQ Sequence 24 AA;
Query Match 100.0%; Score 77; DB 2; Length 24;
Best Local Similarity 100.0%; Pred. No. 0.00014;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15
DB 8 RIQRGPGRAFTVIGK 22
RESULT 90
AAY39769
ID AAY39769 standard; peptide; 24 AA.
XX

```

```

AC AAY39769;
XX
DT 17-OCT-2003 (revised)
DT 26-NOV-1999 (first entry)
XX
DE HIV1 chimeric peptide.
XX
KW HIV; vaccine; immunogenic composition; T cell epitope; B cell epitope;
KW infection; antibody; antiviral.
XX
OS Human immunodeficiency virus 1.
XX
PN US5951986-A.
XX
PD 14-SEP-1999.
XX
PF 06-JUN-1995; 95US-00467881.
XX
PR 09-JUN-1993; 93US-00073378.
PR 09-JUN-1994; 94US-00257528.
XX
PA (CONN-) CONNAUGHT LAB LTD.
XX
PI Klein MH, Chong P, Sia CDY;
XX
DR WPI; 1999-550482/46.
XX
PT Immunogenic composition containing synthetic fusion polypeptides
PT containing both the T and B cell epitopes of the human immunodeficiency
PT virus, useful antigens in producing vaccines.
XX
PS Disclosure; Col 73-74; 43pp; English.
XX
CC This sequence represents a fragment of a HIV1 protein, and can be used in
CC the immunogenic composition of the invention. The composition comprises a
CC synthetic fusion polypeptide which includes a sequence encoding 1 or more
CC T cell epitopes and a sequence encoding 1 or more B cell epitopes and a
CC carrier. Both the T cell and B cell epitopes are derived from HIV
CC proteins. The compositions are useful as vaccines against HIV infection.
CC The composition induces HIV-1-specific polyclonal antibodies that are
CC opsonising and antiviral. The peptide components may be selected to
CC induce a response against different viral isolates and in subjects who
CC recognise different T cell epitopes. (Updated on 17-OCT-2003 to
CC standardise OS field)
XX
SQ Sequence 24 AA;
Query Match 100.0%; Score 77; DB 2; Length 24;
Best Local Similarity 100.0%; Pred. No. 0.00014;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIGK 15
DB 7 RIQRGPGRAFTVIGK 21
RESULT 91
AAB15873
ID AAB15873 standard; peptide; 24 AA.
XX
AC AAB15873;
XX
DT 17-JAN-2001 (first entry)
XX
DE Human chemokine derived peptide #25.
XX
KW Macrophage recruitment; chemokine derivative; MCP-1; osteoporosis;
KW monocyte chemoattractant protein-1; inflammation; atherosclerosis; HIV;
KW AIDS; stroke; psoriasis; autoimmune disease; hypertension; endotoxaemia;
KW basophil-mediated disease; myocardial infarction; acute ischaemia;
KW rheumatoid arthritis; contraception.
XX
OS Synthetic.

```

XX PN WO200042071-A2.  
 XX PD 20-JUL-2000.  
 XX PF 12-JAN-2000; 2000WO-US000821.  
 XX PR 12-JAN-1999; 99US-00229071.  
 XX PR 17-MAR-1999; 99US-00271192.  
 XX PR 01-DEC-1999; 99US-00452406.  
 XX PA (NEOR-) NEORX CORP.  
 XX PF Grainger DJ, Tatalick LM;  
 XX PI WPI; 2000-499101/44.  
 XX DR  
 XX PT New peptide 3, amide and heterocyclic compounds and saccharide conjugates  
 XX PT used for inhibiting chemokine induced activity and for treating e.g.  
 XX PT stroke, vascular diseases, autoimmune diseases and tumor growth.  
 XX PS Disclosure; Fig 18; 387pp; English.  
 XX CC The present invention concerns the identification of a number of  
 XX CC chemokines which can be used to produce derivatives, agonists and  
 XX CC antagonists which are then useful in disease treatment. The chemokines  
 XX CC include sequences AAB15785-B15794, AAB15803-B15813 and AAB15831-B15848.  
 XX CC These chemokine derivatives can be used to treat diseases such as  
 XX CC autoimmune diseases, atherosclerosis, osteoporosis, HIV infection and  
 XX CC AIDS, psoriasis, inflammatory diseases, hypertension, basophil-mediated  
 XX CC diseases, endotoxaemia, myocardial infarction, acute ischaemia and  
 XX CC rheumatoid arthritis, and can be used to prevent strokes and as  
 XX CC contraceptives. The coding sequences for the chemokines can be used in  
 XX CC gene therapy for the same diseases, as well as in the production of  
 XX CC animal models  
 XX CC  
 XX SQ Sequence 24 AA;  
 Query Match 100.0%; Score 77; DB 3; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQGGGGAFTVIGK 15  
 DB 8 RIQGGGGAFTVIGK 22  
 RESULT 92  
 AAB68602  
 ID AAB68602 standard; peptide; 24 AA.  
 AC AAB68602;  
 XX  
 XX 11-SEP-2003 (revised)  
 DT 25-APR-2001 (first entry)  
 DE HIV gp120 V3 loop peptide #2.  
 XX  
 XX HIV gp120 V3 loop; liposome composition; HIV infection.  
 XX  
 XX Human immunodeficiency virus 1.  
 OS  
 XX US6180134-B1.  
 XX  
 XX 30-JAN-2001.  
 PD  
 XX 07-JUN-1995; 95US-00480332.  
 PF  
 XX 23-MAR-1993; 93US-00035443.  
 PR 29-SEP-1994; 94US-00316436.  
 XX  
 XX (SEQU-) SEQUUS PHARM INC.  
 PA  
 XX

PI Zalipsky S, Woodle MC, Martin EJ, Barenholz Y;  
 XX WPI; 2001-201897/20.  
 XX  
 XX PT Liposome composition for use in treating septic shock comprises liposomes  
 XX PT having an outer surface layer of polyethylene glycol chains, and a  
 XX PT polypeptide or polysaccharide effector molecule.  
 XX PS Disclosure; Fig 13; 32pp; English.  
 XX CC The present invention relates to a liposome composition comprising  
 XX CC liposomes having an outer surface layer of polyethylene glycol chains,  
 XX CC each having a free distal end. A polypeptide or polysaccharide effector  
 XX CC molecule is covalently attached to a portion of the distal ends. The  
 XX CC effector interferes with specific binding of pathogen or cell in a  
 XX CC bloodstream to a target cell or cell matrix, and is rapidly removed by  
 XX CC renal clearance from the bloodstream when administered in free form. The  
 XX CC liposome composition may be used in treating a condition mediated by  
 XX CC binding a pathogen or cell in the bloodstream, to a target cell or cell  
 XX CC matrix. It can be used in treating septic shock, toxic shock, colonic  
 XX CC inflammation, leukaemic cell proliferation, or HIV infection. The present  
 XX CC sequence is a peptide of the V3 loop of HIV envelope protein gp120. This  
 XX CC peptide may be used in the composition of the present invention. gp120  
 XX CC binds to the CD4 receptor during HIV infection of lymphocytes. By  
 XX CC introducing the present peptide, the CD4 receptors are blocked, thereby  
 XX CC inhibiting HIV infection. (Updated on 11-SEP-2003 to standardise OS  
 XX CC field)  
 XX SQ Sequence 24 AA;  
 Query Match 100.0%; Score 77; DB 4; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQGGGGAFTVIGK 15  
 DB 8 RIQGGGGAFTVIGK 22  
 RESULT 93  
 AAP82464  
 ID AAP82464 standard; protein; 25 AA.  
 XX  
 XX AAP82464;  
 AC  
 XX 25-MAR-2003 (revised)  
 DT 12-NOV-1990 (first entry)  
 DE Peptide component of AIDS vaccine.  
 XX  
 XX AIDS vaccine; T-cells.  
 XX  
 XX Synthetic.  
 OS  
 XX EP273716-A.  
 PN  
 XX 06-JUL-1988.  
 PD  
 XX 23-DEC-1987; 87EP-00311391.  
 PF  
 XX 30-DEC-1986; 86US-00947935.  
 PR 12-FEB-1987; 87US-00014430.  
 XX  
 XX (USDC ) US SEC OF COMMERCE.  
 PA (USSH ) US DEPT HEALTH & HUMAN SERVICE.  
 XX  
 XX Delisi C, Margalit H, Cornette JL, Ouyang CS;  
 PI WPI; 1988-184640/27.  
 XX  
 XX Synthetic peptide(s) as vaccines for AIDS - selected from peptide regions  
 XX PT which can fold as a maximally amphipathic helix recognised by I cells.  
 XX

PS. Claim 9; Page 10; 16pp; English.

XX This peptide is a component of an AIDS vaccine. It can fold as a  
 CC maximally amphipathic helix and is recognised by T-cells immune to the  
 CC AIDS virus envelope protein. See also AAP82462-63 and AAP82465-79.  
 CC (Updated on 25-MAR-2003 to correct PA field.)

XX SQ Sequence 25 AA;

Query Match 100.0%; Score 77; DB 1; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQRGPGRAFTVIGK 15  
 |||||  
 Db 2 RIQRGPGRAFTVIGK 16

RESULT 94

AAP90281  
 ID AAP90281 standard; protein; 25 AA.

XX AC AAP90281;

XX DT 09-SEP-2004 (revised)

XX DT 24-OCT-2003 (revised)

XX DT 25-MAR-2003 (revised)

XX DT 22-JUN-1990 (first entry)

XX DE Peptide 135 of HIV env gene.

XX KW HIV; AIDS; env gene; HIV vaccine; ds.

XX OS Simian-Human immunodeficiency virus.

XX OS Unidentified.

XX PN EP306219-A.

XX PD 08-MAR-1989.

XX PF 25-AUG-1988; 88EP-00307889.

XX PR 27-AUG-1987; 87US-00090080.

XX PA (REP) REPLIGEN CORP.

XX PI Rusche JR, Putney SD, Jayaherian K, Farley J, Grimailla R, Lynn D;

XX PI Petro J, Okeeffe T;

XX DR WPI; 1989-070387/10.

XX PT New HIV proteins and peptide(s) - used in diagnosis, prophylaxis or

XX PT therapy of AIDS, esp. for prepn. of vaccines against HIV infection.

XX PS Claim 1; Page 27; 29pp; English.

XX CC Protein derivative stimulates a lymphocyte proliferative response in HIV-

XX CC infected humans, providing a means of diagnosis, protection and

XX CC therapeutic value. (Updated on 25-MAR-2003 to correct PR field.) (Updated

XX CC on 25-MAR-2003 to correct PA field.) (Updated on 24-OCT-2003 to

XX CC standardise OS field)

XX CC Revised record issued on 09-SEP-2004 : Correction to location

XX SQ Sequence 25 AA;

Query Match 100.0%; Score 77; DB 1; Length 25;

Best Local Similarity 100.0%; Pred. No. 0.00014;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQRGPGRAFTVIGK 15  
 |||||  
 Db 8 RIQRGPGRAFTVIGK 22

RESULT 95

AAR08276

ID AAR08276 standard; protein; 25 AA.

XX AC AAR08276;

XX DT 07-MAR-1991 (first entry)

XX DE HIV peptide fragment (IIIB isolate).

XX KW AIDS; ARC; conjugate immunogen; Neisseria outer membrane protein;

XX KW HIV major neutralisation determinant.

XX OS Human immunodeficiency virus.

XX PN EP402088-A.

XX PD 12-DEC-1990.

XX PF 05-JUN-1990; 90EP-00306082.

XX PR 06-JUN-1989; 89US-00362176.

XX PR 06-JUN-1989; 89US-00362177.

XX PR 06-JUN-1989; 89US-00362178.

XX PR 06-JUN-1989; 89US-00362179.

XX PA (MERI ) MERCK & CO INC.

XX PI Emini EA, Marburg S, Scolnick EM, Larson VM;

XX DR WPI; 1990-370100/50.

XX CC Conjugate immunogen for AIDS and ARC treatment - composed of neutralising

XX CC determinant of HIV and Neisseria outer membrane.

XX PS Claim 2; Page 22; 24pp; English.

XX CC This peptide is derived from the HIV IIIB isolate and is cross- reactive

XX CC with the HIV major neutralisation determinant (MNTD). This MNTD is used

XX CC in a conjugate, covalently linked to the outer membrane protein (Omp)

XX CC from Neisseria, as an immunogen for vaccination against AIDS. A cocktail

XX CC of different MNTD poly- peptides can be used. See also AAR08274-75 and

XX CC AAR08277

XX SQ Sequence 25 AA;

Query Match 100.0%; Score 77; DB 2; Length 25;

Best Local Similarity 100.0%; Pred. No. 0.00014;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQRGPGRAFTVIGK 15  
 |||||  
 Db 8 RIQRGPGRAFTVIGK 22

RESULT 96

AAR13120

ID AAR13120 standard; peptide; 25 AA.

XX AC AAR13120;

XX DT 24-OCT-2003 (revised)

XX DT 01-OCT-1991 (first entry)

XX DE Binding site of BAT123 and BAT267 HIV antibodies.

XX KW Anti-idiotypic; antibody; gp120; HIV; human immunodeficiency virus;

XX KW paratope; complementarity determining region; CDR; immunisation; vaccine;

XX KW immunotoxin; T-cell; AIDS; ARC.

XX OS Simian-Human immunodeficiency virus.

XX PN WO9109625-A.  
 XX PD 11-JUL-1991.  
 XX PF 21-DEC-1989; 89US-00454161.  
 XX PR 21-DEC-1989; 89US-00454161.  
 XX PR 12-JUN-1990; 90US-00531789.  
 XX PA (TANO-) TANOX BIOSYSTEMS IN.  
 XX PI Chang TW, Fung MSC, Sun CRY, Sun BNC, Chang NT;  
 XX DR WPI; 1991-222664/30.  
 XX PT Monoclonal antibodies specific to the gp120 HIV envelope protein - for  
 XX PT immunisation against HIV in treatment of AIDS or ARC.  
 XX PS Claim 5; Page 97; 124pp; English.  
 XX CC The peptide corresponds to residues 294-318 of the gp120 envelope protein  
 CC of HIV-1 which is a principal neutralising determinant (PND). Abs  
 CC recognise residues 294-308 (Mab BAT267) or 304-318 (Mab 123). These Mab  
 CC are used to raise anti-idiotypic Abs (AAbs). The AAbs are useful for  
 CC passive immunisation and as components for immunotoxins which destroy T-  
 CC cells infected with HIV. They inhibit T-cell infection and syncytium  
 CC formation, are group specific and neutralise specific strains of HIV-1.  
 CC They can be used to treat AIDS or ARC. The AAbs can be used for active  
 CC immunisation or can be admin with another vaccine to increase  
 CC antigenicity. See also AAR13121. (Updated on 24-OCT-2003 to standardise  
 CC OS field)  
 XX SQ Sequence 25 AA;  
 Query Match 100.0%; Score 77; DB 2; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQPGPGRAFTVIGK 15  
 DB 11 RIQPGPGRAFTVIGK 25  
 RESULT 97  
 AAR15058  
 ID AAR15058 standard; protein; 25 AA.  
 AC AAR15058;  
 XX DT 03-JAN-1992 (first entry)  
 XX DE HIV-1 amplifier peptide #21.  
 XX KW human immunodeficiency virus; vaccine; human retrovirus; AIDS;  
 KW acquired immunodeficiency syndrome; envelope glycoprotein.  
 XX OS Synthetic.  
 XX PN WO9114449-A.  
 XX PD 03-OCT-1991.  
 XX PF 19-MAR-1990; 90US-00494749.  
 XX PR 19-MAR-1990; 90US-00494749.  
 XX PA (INSP ) INST PASTEUR.  
 XX PI Girard M;  
 XX DR WPI; 1991-310366/42.  
 XX

PT Enhancing immunogenicity of envelope glycoprotein - for use as vaccine  
 PT or immuno:therapeutic drug especially against HIV, HTLV-I and HTLV-II.  
 XX Claim 13; Page 50; 71pp; English.  
 XX CC This peptide is one example of an HIV-1 amplifier peptide for use in a  
 CC composition for enhancing the immunogenicity of an envelope glycoprotein  
 CC of a virus. The sequence corresponds to the major neutralisation epitope  
 CC (loop V3) of HIV-1 bruii isolate and enhances the induction of  
 CC persistent neutralising antibodies in the host. The amplifier peptide is  
 CC used in addition to an envelope glycoprotein for priming the induction of  
 CC neutralising antibodies. The compositions are particularly useful for  
 CC vaccinating against HIV, SIV, HTLV-I and HTLV-II  
 XX SQ Sequence 25 AA;  
 Query Match 100.0%; Score 77; DB 2; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQPGPGRAFTVIGK 15  
 DB 8 RIQPGPGRAFTVIGK 22  
 RESULT 98  
 AAR31276  
 ID AAR31276 standard; peptide; 25 AA.  
 XX AC AAR31276;  
 XX DT 12-FEB-1993 (first entry)  
 XX DE HIV principal determinant peptide.  
 XX KW AIDS; ARC; human immunodeficiency virus; vaccine; Neisseria;  
 KW meningitidis b; outer membrane protein complex; OMPC; PND135.  
 XX OS Synthetic.  
 XX FH Key Location/Qualifiers  
 FT Modified-site 1 /note= "bonds to the OMPC of the conjugate via this site"  
 FT EP467700-A.  
 XX PN 22-JAN-1992.  
 XX PF 19-JUL-1991; 91EP-00306598.  
 XX PR 19-JUL-1990; 90US-00553339.  
 XX PR 19-JUL-1990; 90US-00555966.  
 XX PR 19-JUN-1991; 91US-00715276.  
 XX PR 19-JUN-1991; 91US-00715278.  
 XX PA (MERI ) MERCK & CO INC.  
 XX PI Leanza WJ, Marburg S, Tolman RL, Emini EA;  
 XX DR WPI; 1992-026505/04.  
 XX PT Conjugate proteins comprising HIV peptide components - useful for  
 XX PT preparing vaccines for e.g. AIDS or for treating infections.  
 XX PS Claim 12; Page 56; 63pp; English.  
 XX CC The invention relates to a co-conjugate comprising an immunogenic protein  
 CC or protein complex having a first set of covalent linkages to low  
 CC molecular weight moieties which have an anionic or polyanionic character  
 CC at physiological pH, and a second set of covalent linkages to peptides  
 CC comprising HIV principal neutralizing determinants (PND's) or  
 CC immunologically equivalent peptides. Preferably at least one set of the  
 CC covalent linkages is comprised of maleimide derivatives; the



CC (poly)anionic moiety is composed of one to five residues of the anionic  
 CC form of a carboxylic, sulphonic or phosphonic acid; the immunogenic  
 CC protein is the outer membrane protein complex (OMPC) of *Neisseria*  
 CC meningitidis b; and the PND peptide has a linear structure, a disulphide-  
 CC bonded cyclic structure, an amide-bonded cyclic structure or a thioether-  
 CC bonded cyclic structure. The present sequence (PND135) is an example of a  
 CC PND peptide component used in the co-conjugate. The co-conjugate is  
 CC useful for inducing anti-peptide immune response in mammals, for inducing  
 CC HIV-neutralising antibodies in mammals, for formulating vaccines to  
 CC prevent HIV infection or disease, including AIDS, or for treating humans  
 CC afflicted with HIV infection or disease  
 XX  
 SQ Sequence 25 AA;

Query Match 100.0%; Score 77; DB 2; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 0.00014; Mismatches 0; Indels 0; Gaps 0;  
 Matches 15; Conservative 0;

Qy 1 RIQGPGRGFAVTIGK 15  
 |||||  
 Db 8 RIQGPGRGFAVTIGK 22

RESULT 99  
 AAR30031  
 ID AAR30031 standard; peptide; 25 AA.

XX AAR30031;

XX 25-MAR-2003 (revised)  
 DT 28-APR-1993 (first entry)

XX HIV principle neutralising determinant 135.

XX Human immunodeficiency virus; AIDS; PND; MIEP; conjugate;  
 KW major immune enhancing protein; vaccine; anti-HIV antibodies; immunogen;  
 KW passive immunisation.

XX Human immunodeficiency virus.

XX EP519554-A1.

XX 23-DEC-1992.

XX 11-JUN-1992; 92EP-00201693.

XX 19-JUN-1991; 91US-00715273.

XX (MERI ) MERCK & CO INC.

XX Emini A, Liu MA, Marburg S, Tolman RL;

XX WPI; 1992-425771/52.

XX Conjugates of HIV-1 PND peptide(s) with the MIEP of *Neisseria*  
 PT meningitidis - useful as a vaccine for treating and preventing HIV-1  
 PT infection, e.g. AIDS in humans.

XX Claim 9; Page 59; 66pp; English.

XX The peptide is HIV principle neutralising determinant (PND) 135 and is  
 CC used as part of a conjugate comprising the major immune enhancing protein  
 CC (MIEP) of *Neisseria meningitidis* covalently linked to the HIV PND. The  
 CC conjugate may be used to prepare vaccines against HIV infections, e.g.  
 CC AIDS, as research tools for studying PND structure- function  
 CC relationships, or as immunogens for use in the passive immunisation of  
 CC humans. (Updated on 25-MAR-2003 to correct PN field.)  
 XX

SQ Sequence 25 AA;

Query Match 100.0%; Score 77; DB 2; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGPGRGFAVTIGK 15  
 |||||  
 Db 8 RIQGPGRGFAVTIGK 22

RESULT 100

AAR26712  
 ID AAR26712 standard; peptide; 25 AA.

XX AAR26712;

XX 09-FEB-1993 (first entry)

XX HIV-PND-polysaccharide-protein conjugate vaccine.

XX Human immunodeficiency virus; principal neutralizing determinant;  
 KW outer membrane protein complex; OMPC; *Neisseria*; AIDS; PND135.

XX Synthetic.

XX Key Location/Qualifiers

FT Modified-site 1..1  
 FT /note= "Joins onto polysaccharide-protein complex via  
 FT this site"

XX EP468714-A.

XX 29-JAN-1992.

XX 19-JUL-1990; 90US-00555558.

XX 19-JUL-1990; 90US-00555558.

XX 19-JUN-1991; 91US-00715275.

XX 19-JUN-1991; 91US-00715277.

XX (MERI ) MERCK & CO INC.

XX Marburg S, Tolman RL, Emini EA;

XX WPI; 1992-034437/05.

XX HIV peptide-polysaccharide-protein conjugates - used in vaccines or to  
 PT produce antibodies to prevent or treat HIV infection.

XX Claim 9; Page 57; 63pp; English.

XX The invention relates to a conjugate of an HIV principal neutralizing  
 CC determinant (PND), or an immunologically equivalent peptide (PEP),  
 CC covalently coupled to an immunogenic protein or protein complex through  
 CC an anionic polysaccharide linker. Pref. the immunogenic protein is the  
 CC outer membrane protein complex (OMPC) of *Neisseria meningitidis* b and the  
 CC PND peptide has a linear structure, a disulphide-bonded cyclic structure,  
 CC an amide-bonded cyclic structure or a thioether-bonded cyclic structure.  
 CC The present sequence (PND135) is an example of a PND peptide component.  
 CC The conjugates are used for inducing HIV-neutralising antibodies or for  
 CC making vaccines to prevent contraction of HIV infection or disease. The  
 CC antibodies can be used for passively protecting against infection by HIV,  
 CC or for protecting against proliferation of HIV post-infection, or for  
 CC treating AIDS, or in diagnostic assays  
 XX Sequence 25 AA;

Query Match 100.0%; Score 77; DB 2; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGPGRGFAVTIGK 15  
 |||||  
 Db 8 RIQGPGRGFAVTIGK 22

RESULT 101  
 AAR33222  
 ID AAR33222 standard; peptide; 25 AA.  
 XX AC AAR33222;  
 XX 25-MAR-2003 (revised)  
 DT 13-JUL-1993 (first entry)  
 XX  
 DE HIV gp120 V3 loop immunogenic peptide RPI35 (IIIB).  
 XX  
 KW HIV-1; human immunodeficiency virus; antibody generation; AIDS;  
 KW infection; CD4 binding site; soluble CD4.  
 XX  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT Region 25  
 FT /note= "not in natural sequence of isolate"  
 XX  
 PN WO9304693-A1.  
 XX  
 PD 18-MAR-1993.  
 XX  
 PF 02-SEP-1992; 92WO-US007511.  
 XX  
 PR 09-SEP-1991; 91US-00756677.  
 PR 20-JUL-1992; 92US-00916542.  
 XX  
 PA (REPK ) REPLIGEN CORP.  
 XX  
 PI Potts BJ, Whiteschaf ME, Field KG, Herlihy WC;  
 DR WPI; 1993-100653/12.  
 XX  
 PT Synergistic compen. for treating HIV-1 infection - comprises antibody to  
 PT V3 loop of gp120 and antibody to CD4 binding site of gp120 or soluble CD4  
 PT polypeptide.  
 PS Example; Page 12; 56pp; English.  
 XX  
 CC The sequence is that of peptide RPI35 (IIIB) used as an immunogen for the  
 CC generation of antibodies directed against the V3 loop of HIV gp120. These  
 CC antibodies can be used as part of a compen. with antibodies directed  
 CC against the CD4 binding site of gp120. The antibodies act synergistically  
 CC to neutralise HIV-1 in the treatment of HIV infection caused by different  
 CC strains. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 25-MAR  
 CC -2003 to correct PI field.)  
 XX  
 SQ Sequence 25 AA;  
 Query Match 100.0%; Score 77; DB 2; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQGPGRGFAVTIGK 15  
 DB 8 RIQGPGRGFAVTIGK 22  
 XX  
 RESULT 102  
 AAR41336  
 ID AAR41336 standard; peptide; 25 AA.  
 XX AC AAR41336;  
 XX 24-OCT-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 22-APR-1994 (first entry)  
 XX  
 DE HIV gp120 V3 region peptide HIV-III B.  
 XX  
 KW V3 region; HIV; envelope gp120; vaccine; human; humoral response;

KW cellular immunity; carrier protein; human serum albumin; HSA;  
 KW keyhole limpet haemocyanin; KLH; multiple antigen peptide.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN WO9318791-A1.  
 XX  
 PD 30-SEP-1993.  
 XX  
 PF 19-MAR-1993; 93WO-JP000327.  
 XX  
 PR 26-MAR-1992; 92JP-00098602.  
 PR 14-AUG-1992; 92JP-00237648.  
 PR 15-MAR-1993; 93JP-00054239.  
 XX  
 PA (TSDT-) TSD KK.  
 XX  
 PI Okuda K;  
 XX  
 DR WPI; 1993-320455/40.  
 XX  
 PT Virus for prevention of HIV infected diseases - comprising several  
 PT peptide(s) consisting of V3 region peptide of envelope gp., 120, etc. and  
 PT complex including carrier protein.  
 XX  
 PS Disclosure; Page 3; 35pp; Japanese.  
 XX  
 CC The sequences given in AAR41336-39 and AAR42664 represent peptides  
 CC derived from the V3 region of HIV envelope gp120. These peptides may be  
 CC used in a vaccine which is effective in humans and animals and activates  
 CC humoral and cellular immunity. The vaccine also contains a carrier  
 CC protein containing a cysteine group, eg. human serum albumin (HSA),  
 CC keyhole limpet haemocyanin (KLH) or multiple antigen peptide. (Updated on  
 CC 25-MAR-2003 to correct PN field.) (Updated on 24-OCT-2003 to standardise  
 CC OS field)  
 XX  
 SQ Sequence 25 AA;  
 Query Match 100.0%; Score 77; DB 2; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQGPGRGFAVTIGK 15  
 DB 8 RIQGPGRGFAVTIGK 22  
 XX  
 RESULT 103  
 AAR41330  
 ID AAR41330 standard; peptide; 25 AA.  
 XX AC AAR41330;  
 XX 25-MAR-2003 (revised)  
 DT 21-APR-1994 (first entry)  
 XX  
 DE HIV gp120 epitope.  
 XX  
 KW HIV; haemagglutinin; reactants; catalysts; cofactors; repressors;  
 KW enhancers; hormones; binders; human immunodeficiency virus.  
 XX  
 OS Human immunodeficiency virus.  
 XX  
 PN WO9319170-A1.  
 XX  
 PD 30-SEP-1993.  
 XX  
 PF 09-MAR-1993; 93WO-US002349.  
 XX  
 PR 16-MAR-1992; 92US-00852412.  
 XX  
 PA (WOHL/) WOHLSTADTER J N.

PI Wohlstadter JN;  
 XX' WPI; 1993-320737/40.  
 XX  
 XX Obtaining a novel mol. - capable of a desired interaction with a  
 PT substrate of interest and a selection molecule expressed by the host.  
 XX  
 XX Claim 151; Page 147; 165pp; English.  
 XX  
 XX The HIV gp120 epitope is used to isolate, create or evolve novel mols.  
 CC including (in)organic and biomolecules such as proteins, peptides,  
 CC nucleic acids, oligonucleotides, lipids, and polysaccharides for use as  
 CC reactants, catalysts, enzymatic cofactors, repressors, enhancers,  
 CC hormones and binders for a wide variety of substrates in industrial and  
 CC therapeutic products. This epitope was isolated from variable region 3 of  
 CC HIV gp120 (amino acids 271-295). (Updated on 25-MAR-2003 to correct PN  
 CC field.)  
 XX  
 XX Sequence 25 AA;  
 SQ  
 Query Match 100.0%; Score 77; DB 2; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1 RIQGPGRGFAVTIGK 15  
 |||||  
 Db 8 RIQGPGRGFAVTIGK 22  
 |||||  
 RESULT 104  
 AAR36587  
 ID AAR36587 standard; peptide; 25 AA.  
 XX  
 AC AAR36587;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 06-SEP-1993 (first entry)  
 XX  
 XX Virus neutralising epitope of envelope glycoprotein of HIV.  
 XX  
 XX Human immunodeficiency virus; gp120; gp160; EGP; VNE; immunity.  
 XX  
 XX Synthetic.  
 OS  
 PN WO9308836-A1.  
 XX  
 XX 13-MAY-1993.  
 PD  
 XX  
 XX 28-OCT-1992; 92WO-EP002459.  
 PF  
 XX  
 XX 28-OCT-1991; 91US-00782154.  
 PR  
 XX 28-OCT-1991; 91US-00782241.  
 PR  
 XX 28-OCT-1991; 91US-00782252.  
 XX  
 XX (INSP ) INST PASTEUR.  
 PA  
 XX  
 XX Girard M;  
 PI  
 XX  
 XX WPI; 1993-167398/20.  
 DR  
 XX  
 XX Enhancing immunogenicity of viral envelope glycoprotein - by co-  
 PT administration of viral envelope glycoprotein itself, and an oligopeptide  
 PT derivative.  
 PT  
 XX  
 XX Disclosure; Page 82; 107pp; English.  
 PS  
 XX  
 XX A novel method of enhancing the immunogenicity of an envelope  
 CC glycoprotein (EGP) of a virus (esp. HIV gp120 or gp160) in a host  
 CC comprises admin. to the host at least one EGP of the virus in an amt.  
 CC sufficient for priming vaccination and at least one peptide derived from  
 CC an amino acid sequence of the EGP (e.g. the sequence shown), where the  
 CC peptide comprises at least one virus-neutralisation epitope (VNE). The  
 CC complex is able to enhance the induction of neutralising antibodies to

CC the virus and to confer long lasting immunity, longer than 6 months. See  
 CC also AAR36567-86. (Updated on 25-MAR-2003 to correct PN field.)  
 XX  
 XX Sequence 25 AA;  
 SQ  
 Query Match 100.0%; Score 77; DB 2; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 0.00014;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1 RIQGPGRGFAVTIGK 15  
 |||||  
 Db 8 RIQGPGRGFAVTIGK 22  
 |||||  
 RESULT 105  
 AAW72819  
 ID AAW72819 standard; peptide; 25 AA.  
 XX  
 AC AAW72819;  
 XX  
 DT 17-OCT-2003 (revised)  
 DT 13-JAN-1999 (first entry)  
 XX  
 XX HIV-1 gp120 epitope 294 to 318.  
 DE  
 XX  
 XX HIV-1; gp120; epitope; monoclonal antibody; envelope; neutralise;  
 KW inhibit; infection; T-cell; inhibit syncytium formation; AIDS.  
 XX  
 XX Human immunodeficiency virus 1.  
 OS  
 XX  
 XX Key Location/Qualifiers  
 FH Peptide 1..15  
 FT /label= peptide\_a  
 FT Peptide 11..25  
 FT /label= peptide\_b  
 XX  
 XX US5834599-A.  
 FN  
 XX  
 XX 10-NOV-1998.  
 PD  
 XX  
 XX 04-MAR-1993; 93US-00026276.  
 PF  
 XX  
 XX 29-MAY-1987; 87US-00057445.  
 PR  
 XX 24-DEC-1987; 87US-00137861.  
 PR  
 XX 25-APR-1989; 89US-00343540.  
 PR  
 XX 05-JUN-1992; 92US-00895197.  
 XX  
 XX (TANO-) TANOX BIOSYSTEMS INC.  
 PA  
 XX  
 XX Sun BN, Fung SC, Kim YW, Sun CR, Chang NT, Chang T;  
 PI WPI; 1999-008810/01.  
 XX  
 XX Antibody conjugate comprising monoclonal antibody - which binds to  
 PT epitope within amino acid residue of gp120 which neutralises HIV-1  
 PT conjugated with, e.g. cytotoxic agent.  
 PT  
 XX  
 XX Disclosure; Col 8; 22pp; English.  
 PS  
 XX  
 XX The present invention describes an antibody conjugate comprising an  
 CC antibody (Ab) which binds to an epitope within amino acid residue 308-322  
 CC of gp120 and neutralises HIV-1, conjugated with a cytotoxic agent, an  
 CC anti-viral agent or an agent which facilitates passage through the blood  
 CC brain barrier. Also described is an antibody conjugate as above but where  
 CC the Ab binds to an epitope within amino acid residue 298-312 of gp120  
 CC which neutralises HIV-1. The present sequence represents an HIV-1 gp120  
 CC epitope corresponding to positions 294 to 318. The Ab are monoclonal Ab  
 CC which bind to the gp120 protein on the envelope of HIV-1. They inhibit  
 CC the infection of T-cells and also inhibit syncytium formation. The  
 CC antibodies are group specific and neutralise different strains and  
 CC isolates of HIV-1. The antibodies have a variety of uses, including the  
 CC treatment and prevention of AIDS and AIDS related complex. They are  
 CC especially used to kill infected T-cells. (Updated on 17-OCT-2003 to

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CC standardise OS field)
XX
SQ Sequence 25 AA;

Query Match      100.0%; Score 77; DB 2; Length 25;
Best Local Similarity 100.0%; Pred. No. 0.00014;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGGGAFVTIGK 15
   |||||
Db 11 RIQGGGAFVTIGK 25

RESULT 106
AAW87618
ID AAW87618 standard; peptide; 25 AA.
AC AAW87618;
XX
XX
DT 17-OCT-2003 (revised)
DT 20-MAR-2003 (revised)
DT 03-MAR-1999 (first entry)
XX
DE Epitope of HIV-1 gp120 protein.
XX
XX Epitope; gp120 protein; monoclonal antibody; HIV-1; antibody BAT123;
KW antibody BAT267; antibody BAT085; T cell infection inhibition;
KW syncytia formation; acquired immune deficiency syndrome; AIDS;
KW AIDS-related complex; passive immunisation; antiviral; cytotoxic;
KW viral load measurement; vaccine.
XX
XX Human immunodeficiency virus 1.
XX
XX US5854400-A.
XX
XX 29-DEC-1998.
XX
XX 22-SEP-1992; 92US-00950571.
XX
XX 29-MAY-1987; 87US-00057445.
PR 24-DEC-1987; 87US-00137861.
PR 26-SEP-1991; 91US-00767533.
XX
PA (TANO-) TANOX INC.
XX
XX Fung MSC, Sun BNC, Sun CRY, Chang NT, Chang TW;
XX
XX WPI; 1999-095002/08.
XX
XX Monoclonal antibodies directed against regions of gp120 of human immune
XX deficiency virus-1 - are neutralising and able to inhibit infection of T
XX cells and formation of syncytia, used for treatment, prevention or
XX diagnosis of acquired immune deficiency syndrome.
XX
XX Claim 2; Col 8; 16pp; English.
XX
XX The present sequence represents an epitope of the gp120 protein of human
XX immune deficiency virus (HIV)-1. The sequence comprises amino acids 298
XX to 322 of gp120. The specification describes monoclonal antibodies which
XX bind to sequences derived from the present epitope. Specifically, these
XX antibodies are designated BAT123, 267 and 085. Monoclonal antibodies
XX neutralise HIV-1, inhibiting both infection of T cells and formation of
XX syncytia, so are used to treat acquired immune deficiency syndrome (AIDS)
XX and AIDS-related complex, by passive immunisation, as carriers of
XX cytotoxic or antiviral agents, and in extracorporeal systems. They can
XX also be used as immunoassay reagents (for diagnosis or measurement of
XX viral load) and to screen for neutralising epitopes, potentially useful
XX in vaccine development. (Updated on 20-MAR-2003 to correct PR field.)
XX (Updated on 17-OCT-2003 to standardise OS field)
XX
SQ Sequence 25 AA;

Query Match      100.0%; Score 77; DB 2; Length 25;
Best Local Similarity 100.0%; Pred. No. 0.00014;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGGGAFVTIGK 15
   |||||
Db 11 RIQGGGAFVTIGK 25

RESULT 107
AAE09522
ID AAE09522 standard; peptide; 25 AA.
AC AAE09522;
XX
XX
DT 19-NOV-2001 (first entry)
XX
XX Human immunodeficiency virus Dd haplotype peptide.
XX
XX Mucin; cytostatic; immunostimulant; cell mediated immune response;
KW carcinoma; adenocarcinoma; breast cancer; dendritic cell; vaccine;
KW gene therapy; CTL; cytotoxin T-lymphocyte.
XX
XX Human immunodeficiency virus.
XX
XX WO200157068-A1.
XX
XX 09-AUG-2001.
XX
XX 01-FEB-2001; 2001WO-AU000090.
XX
XX 01-FEB-2000; 2000AU-00005369.
PR 14-JUN-2000; 2000US-00593870.
XX
XX (AUST-) AUSTIN RES INST.
XX
XX Mckenzie IFC, Pietersz GA, Apostolopoulos V;
XX
XX WPI; 2001-541537/60.
XX
XX Immunostimulant peptide, used as an anti-carcinoma vaccine, comprises a
XX an epitope of the non-VNTR, non-leader region of a mucin.
XX
XX Disclosure; Page 19; 84pp; English.
XX
XX The patent discloses peptide or polypeptides capable of eliciting an
XX immune response, comprising an amino acid sequence corresponding to an
XX epitope of the non-central portion of varying numbers of an amino acid
XX motif (VNTR), non-leader region of a mucin. The peptides of the
XX invention, fusion proteins comprising the peptide and conjugate compounds
XX with carbohydrate polymers are used to induce a cell mediated immune
XX response against mucin in the prevention or treatment of carcinoma,
XX preferably adenocarcinoma, most preferably breast cancer. They are also
XX used to pulse dendritic cell for in vivo transfer and use as a vaccine.
XX They are also used in gene therapy. The present sequence is a human
XX immunodeficiency virus (HIV) haplotype kd peptide used as a negative
XX control for the prediction of CTL (cytotoxic T-lymphocyte) epitopes
XX
XX Sequence 25 AA;

Query Match      100.0%; Score 77; DB 4; Length 25;
Best Local Similarity 100.0%; Pred. No. 0.00014;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGGGAFVTIGK 15
   |||||
Db 5 RIQGGGAFVTIGK 19

RESULT 108
AAR04427
ID AAR04427 standard; peptide; 25 AA.
XX
XX AAR04427;
AC

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XX 09-SEP-2004 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 20-SEP-1990 (first entry)  
 XX Human immunodeficiency virus peptide 135.  
 DE  
 XX HIV-IIIB; peptide 135; principal neutralising domain; antibodies;  
 KW diagnosis; prophylaxis; therapy; AIDS.  
 KW  
 XX Synthetic.  
 OS  
 XX WO9003984-A.  
 PN  
 XX 19-APR-1990.  
 PD  
 XX 03-OCT-1988; 88US-00252949.  
 PF  
 XX 03-OCT-1988; 88US-00252949.  
 PR  
 PR 01-JUN-1989; 89US-00359543.  
 PR 19-SEP-1989; 89US-00407663.  
 XX  
 PA (REPK ) REPLIGEN CORP.  
 XX  
 PI Rusche JR, Putney SD, Javaherian K, Farley J, Grimalia R;  
 PI Lynn DU, Petrobre J;  
 XX  
 DR WPI; 1990-147824/19.  
 XX  
 PT Principal neutralising domain of HIV variants - used for producing  
 PT peptide(s) and antibodies for diagnosis, prophylaxis and/or therapy  
 PT therapy of HIV infection.  
 XX  
 PS Claim 8 (30); Page 75; 108pp; English.  
 XX  
 CC Peptide 135 comprises segments of the Principal Neutralising Domain  
 CC (envelope protein) from isolate HIV-IIIB. The last Cys residue is added  
 CC for the purpose of crosslinking to carrier proteins. Cysteine residues  
 CC can be added so that that residues at or near both ends form a disulfide  
 CC bond, thus giving the peptide a loop-like configuration, which is  
 CC utilised to enhance the immunogenic properties of the peptide. The  
 CC peptide is capable of eliciting, and/or binding with, neutralising  
 CC antibodies. The neutralising domain is bounded by cysteine residues which  
 CC occur at positions 296 and 331. Peptides can be used as immunogens or  
 CC screening reagents to generate or identify poly- or WAbs. See also  
 CC AAR04427-R04506 and AAR04273-004279. (Updated on 25-MAR-2003 to correct  
 CC PR field.) (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-  
 CC MAR-2003 to correct PI field.)  
 CC  
 CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key  
 XX  
 XX Sequence 25 AA;  
 SQ  
 Query Match 97.4%; Score 75; DB 2; Length 25;  
 Best Local Similarity 93.3%; Pred. No. 0.00028;  
 Matches 14; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
 OY 1 RIQGPGRFAVTIGK 15  
 |||||  
 DB 8 RIQGPGRFAVTIGK 22  
 |||||  
 RESULT 109  
 AAR66419  
 ID AAR66419 standard; peptide; 15 AA.  
 XX  
 AC AAR66419;  
 XX  
 XX 25-MAR-2003 (revised)  
 DT 03-AUG-1995 (first entry)  
 XX  
 XX HIV-1 IIIB peptide 18-4.  
 DE  
 XX

KW T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KW cluster peptide; principal neutralising determinant.  
 OS Synthetic.  
 XX  
 PN WO9426785-A1.  
 XX  
 PD 24-NOV-1994.  
 XX  
 PF 13-MAY-1994; 94WO-US005142.  
 XX  
 PR 14-MAY-1993; 93US-00060988.  
 XX  
 XX (USSH ) US SEC DEPT HEALTH.  
 XX  
 PI Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
 XX  
 XX WPI; 1995-006707/01.  
 DR  
 XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 XX responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 PT  
 XX Example 1; Page 33; 120pp; English.  
 PS  
 XX Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC in the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCLUS 3-18 and PCLUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substd. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRAP). In peptide 18-4, the Arg residue at  
 CC position 4 in peptide 18 has been replaced by a Lys residue. (Updated on  
 CC 25-MAR-2003 to correct PN field.)  
 XX  
 SQ Sequence 15 AA;  
 Query Match 96.1%; Score 74; DB 2; Length 15;  
 Best Local Similarity 93.3%; Pred. No. 0.00025;  
 Matches 14; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
 OY 1 RIQGPGRFAVTIGK 15  
 |||||  
 DB 1 RIQGPGRFAVTIGK 15  
 |||||  
 RESULT 110  
 AAR66430  
 ID AAR66430 standard; peptide; 15 AA.  
 XX  
 AC AAR66430;  
 XX  
 XX 25-MAR-2003 (revised)  
 DT 03-AUG-1995 (first entry)  
 XX  
 XX HIV-1 IIIB peptide 18-15.  
 DE  
 XX  
 KW T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KW cluster peptide; principal neutralising determinant.  
 OS Synthetic.  
 XX  
 XX WO9426785-A1.  
 PN  
 XX 24-NOV-1994.  
 PD  
 XX 13-MAY-1994; 94WO-US005142.  
 PF  
 XX

PR 14-MAY-1993; 93US-00060988.  
 XX (USSH ) US SEC DEPT HEALTH.  
 XX Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
 XX WPI; 1995-006707/01.  
 XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 XX Example 1; Page 33; 120pp; English.  
 XX Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC in the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCLUS 3-18 and PCLUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substd. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRAP). In peptide 18-15, the Lys residue at  
 CC position 15 in peptide 18 has been replaced by a Gln residue. (Updated on  
 CC 25-MAR-2003 to correct PN field.)  
 XX Sequence 15 AA;  
 SQ Query Match 94.8%; Score 73; DB 2; Length 15;  
 Best Local Similarity 93.3%; Pred. No. 0.00036;  
 Matches 14; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
 OY 1 RIQRGGRGFAVTVIGK 15  
 Db |||||  
 1 RIQRGGRGFAVTVIGK 15  
 RESULT 111  
 AAR66424  
 ID AAR66424 standard; peptide; 15 AA.  
 AC AAR66424;  
 XX 25-MAR-2003 (revised)  
 DT 03-AUG-1995 (first entry)  
 XX HIV-1 IIIB peptide 18-9.  
 DE T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KW cluster peptide; principal neutralising determinant.  
 XX Synthetic.  
 OS WO9426785-A1.  
 PN 24-NOV-1994.  
 PD 13-MAY-1994; 94WO-US005142.  
 PF 14-MAY-1993; 93US-00060988.  
 PR (USSH ) US SEC DEPT HEALTH.  
 XX Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
 XX WPI; 1995-006707/01.  
 XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.

PS Example 1; Page 33; 120pp; English.  
 XX Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC in the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCLUS 3-18 and PCLUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substd. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRAP). In peptide 18-9, the Ala residue at  
 CC position 9 in peptide 18 has been replaced by a Val residue. (Updated on  
 CC 25-MAR-2003 to correct PN field.)  
 XX Sequence 15 AA;  
 SQ Query Match 94.8%; Score 73; DB 2; Length 15;  
 Best Local Similarity 93.3%; Pred. No. 0.00036;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 1 RIQRGGRGFAVTVIGK 15  
 Db |||||  
 1 RIQRGGRGFAVTVIGK 15  
 RESULT 112  
 ABB05775  
 ID ABB05775 standard; peptide; 20 AA.  
 XX ABB05775;  
 AC ABB05775;  
 XX 29-AUG-2003 (revised)  
 DT 07-MAY-2002 (first entry)  
 XX HIV gp120 related peptide SEQ ID NO:1.  
 DE Polyfunctional base sequence; microgene; industrial; cell culture;  
 KW artificial matrix protein; transgenic animal; HIV.  
 KW Human immunodeficiency virus 1.  
 OS WO200196558-A1.  
 PN 20-DEC-2001.  
 PD 15-JUN-2001; 2001WO-JP0051116.  
 PF 16-JUN-2000; 2000JP-00180997.  
 PR (NISC-) JAPAN SCI & TECHNOLOGY CORP.  
 PA Shiba K;  
 XX WPI; 2002-098069/13.  
 DR Polyfunctional base sequence having two or more functions in different  
 XX reading frames, useful for producing artificial matrix proteins for cell  
 PT culture.  
 PS Example 1; Page 46; 61pp; Japanese.  
 XX The present invention describes a polyfunctional base sequence (N1)  
 CC having two or more functions in different reading frames. Also described  
 CC are: (1) a method for producing N1 and artificial gene expression vectors  
 CC comprising N1; (2) transgenic non-human animals comprising N1; and (3)  
 CC treatments and diagnostic reagents containing an artificial protein,  
 CC artificial tissues or high molecular weight artificial proteins. N1 is  
 CC useful for creating industrially useful artificial matrix proteins for  
 CC cell culture. The present sequence represents a peptide which is used in  
 CC an example from the present invention. (Updated on 29-AUG-2003 to  
 CC standardise OS field)

SQ Sequence 20 AA;  
 Query Match 94.8%; Score 73; DB 5; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 0.00047;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 RIQPGGRTFTVIGK 15  
 |||||  
 Db 5 RIQPGGRTFTVIGK 19

RESULT 113  
 AAO15657  
 ID AAO15657 standard; peptide; 20 AA.  
 XX AC AAO15657;  
 XX DT 08-NOV-2002 (first entry)  
 XX DE Strong immune response induction-related peptide 1.  
 XX KW Strong immune response induction; high-order protein structure formation;  
 XX KW antigen presentation; HIV.  
 XX OS Unidentified.  
 XX PN WO200233074-A1.  
 XX PD 25-APR-2002.  
 XX PF 10-OCT-2001; 2001WO-JP008893.  
 XX PR 13-OCT-2000; 2000JP-00314288.  
 XX PA (NISC-) JAPAN SCI & TECHNOLOGY CORP.  
 XX PI Shiba K, Ohno T;  
 XX DR WPI; 2002-519151/55.  
 XX PT Artificial protein capable of inducing a strong immune response to a  
 PT peptide group for assisting antibody production in vivo to viruses and  
 PT other antigens.  
 XX PS Claim 6; Page 5; 77pp; Japanese.  
 XX CC The invention comprises an artificial protein which induces a strong  
 CC immune response to a peptide group (the protein contains all or part of  
 CC the peptide group). The artificial protein assists the formation of high-  
 CC order protein structure and/or assists the antigen presentation of  
 CC immunocompetent cells. The artificial protein of the invention is useful  
 CC for inducing a strong immune response and the preparation of effective  
 CC antibodies to specific antigens, especially HIV. The present amino acid  
 CC sequence represents a peptide that was used in the invention  
 XX SQ Sequence 20 AA;  
 Query Match 94.8%; Score 73; DB 5; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 0.00047;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 RIQPGGRTFTVIGK 15  
 |||||  
 Db 5 RIQPGGRTFTVIGK 19

RESULT 114  
 AAR66416  
 ID AAR66416 standard; peptide; 14 AA.  
 XX AC AAR66416;  
 XX DT 25-MAR-2003 (revised)

DT 03-AUG-1995 (first entry)  
 XX HIV-1 IIIB peptide 18-1 (316-330).  
 XX T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KW cluster peptide; principal neutralising determinant.  
 XX OS Synthetic.  
 XX PN WO9426785-A1.  
 XX PD 24-NOV-1994.  
 XX PF 13-MAY-1994; 94WO-US005142.  
 XX PR 14-MAY-1993; 93US-00060988.  
 XX PA (USSH ) US SEC DEPT HEALTH.  
 XX PI Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
 XX WPI; 1995-006707/01.  
 XX PT Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 XX PS Example 1; Page 33; 120pp; English.  
 XX CC Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC in the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCLUS 3-18 and PCLUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substd. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRAF). In peptide 18-1, the N-terminal residue  
 CC (Arg) in peptide 18 has been deleted. (Updated on 25-MAR-2003 to correct  
 CC PN field.)  
 XX SQ Sequence 14 AA;  
 Query Match 93.5%; Score 72; DB 2; Length 14;  
 Best Local Similarity 100.0%; Pred. No. 0.00048;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2 IORGPGRAFVTIGK 15  
 |||||  
 Db 1 IORGPGRAFVTIGK 14

RESULT 115  
 AAP95357  
 ID AAP95357 standard; peptide; 15 AA.  
 XX AC AAP95357;  
 XX DT 27-AUG-2003 (revised)  
 XX DT 30-MAR-1992 (first entry)  
 XX DE Variable region V3, found in the envelope protein gp120 of an AIDS or ARC  
 XX causing or related virus.  
 XX KW Vaccine; AIDS; ARC; HIV; diagnosis.  
 XX OS HTLV-IIIB.  
 XX FH Key Location/Qualifiers  
 FT Misc-difference 3..15 /note= "an example of a peptide of the invention"

FT Misc-difference 3. .13 /notes "see above"  
 FT Misc-difference 3. .12 /notes "see above"

PN EP311219-A.

XX 12-APR-1989.

XX 07-OCT-1988; 88EP-00202248.

XX 09-OCT-1987; 87NL-00002403.

XX (DIER-) STICHTING CENT DIER.

PA (UNAM) UNIV VAN AMSTERDAM.

PA (UYAM-) UNIV AMSTERDAM ZIEKENHUI.

PI Goudsmit J, Melen RH;

XX WPI; 1989-108193/15.

XX Oligopeptide(s) corresp. to beta-turn variable region of gp.120 - used  
 PT for diagnosis of and prodn of vaccines against AIDS and ARC.

XX Disclosure; Page 3; 7pp; English.

CC The peptides of the invention comprise the beta-turn AA SQ GPG or GPGR at  
 CC positions 312-314 or 312-315 in the AA numbering of HTLV-IIIB (BH10) and  
 CC flanking AA SQs having a length equal to or greater than 1 and pref.  
 CC equal to or greater than 2 AAs; variants in which the GPG or GPGR SQ has  
 CC been replaced by a different beta-turn SQ; and variants in which the free  
 CC NH2-terminal gp AA and/or the free carboxyl terminal gp. AA has been  
 CC blocked or modified otherwise. (Updated on 27-AUG-2003 to correct OS  
 CC field.)

XX Sequence 15 AA;

Query Match 93.5%; Score 72; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.00051;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRGAFVTIG 14

Db 2 RIQGPGRGAFVTIG 15

RESULT 116

AAR33460

ID AAR33460 standard; peptide; 15 AA.

XX AAR33460;

XX 27-AUG-2003 (revised)

DT 25-MAR-2003 (revised)

DT 17-DEC-2001 (revised)

DT 03-JUL-1993 (first entry)

XX Sequence of synthetic peptide which represents residues 315-329 of the  
 DE pg160 envelope protein of HIV-1 isolate IIB.

XX Cytotoxic T lymphocyte; immunogenic peptide; V3 loop; treatment;  
 KW glycoprotein 160.

XX Human immunodeficiency virus 1.

XX USN7847311-N.

XX 01-JAN-1993.

XX 06-MAR-1992; 92US-00847311.

XX 26-JAN-1988; 88US-00148692.

PR 18-SEP-1991; 91US-00760530.

XX

PA (USSH) US DEPT HEALTH & HUMAN SERVICE.

XX Berzofsky JA, Taskeshita T, Shirai M, Pendleton CD, Kozlowski S;

XX WPI; 1993-093577/11.

XX Peptide(s) for stimulation of cytotoxic T cells specific for HIV-1 -  
 PT which correspond to residues 318-327 of HIV-1 gp 160 envelope  
 FT glycoprotein.

XX Disclosure; Page 9; 61pp; English.

XX The peptide corresp. to residues 319-329 of HIV-1 strain IIB gp. 160  
 CC envelope glycoprotein. It is activated by cleavage with a protease to  
 CC produce a peptide which is more active in eliciting a cytotoxic T  
 CC lymphocyte (CTL) response. It can be used for the treatment and/or  
 CC prophylaxis of HIV infection. (Note: Revised entry submitted to correct  
 CC the patent number format of US Government-owned NTIS applications to  
 CC prevent clashes with ongoing US granted patent numbers. For further  
 CC information please visit the Derwent web site at  
 CC www.derwent.com/dwpi/updates/ntis\_us.html.) (Updated on 25-MAR-2003 to  
 CC correct PF field.) (Updated on 27-AUG-2003 to correct OS field.)

XX Sequence 15 AA;

Query Match 93.5%; Score 72; DB 2; Length 15;  
 Best Local Similarity 93.3%; Pred. No. 0.00051;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQGPGRGAFVTIG 15

Db 1 RIQGPGRGAFVTIG 15

RESULT 117

AAR62166

ID AAR62166 standard; peptide; 15 AA.

XX AAR62166;

XX 27-AUG-2003 (revised)

DT 25-MAR-2003 (revised)

DT 03-MAY-1995 (first entry)

XX HIV-1 gp120 V3 loop dominant neutralising domain in chimpanzees.

XX epitope; autoantibody; immunoinfective cluster virus;  
 KW nuclear protein antigen; systemic rheumatic disorder;  
 KW human immunodeficiency virus; HIV-1; systemic lupus erythematosus;  
 KW mixed connective tissue disease; scleroderma; glycoprotein 120.

XX Human immunodeficiency virus 1.

XX WO9420141-A1.

XX 15-SEP-1994.

XX 10-MAR-1994; 94WO-US002631.

XX 11-MAR-1993; 93US-00029850.

XX (UYSC-) UNIV SOUTHERN CALIFORNIA.

XX Douvas A, Takehana Y, Ehresmann G;

XX WPI; 1994-302689/37.

XX Methods for treating immunoinfective cluster virus infections - utilise  
 PT antibodies or fragments characteristic of auto antibodies produced by  
 PT patients with rheumatic disorders.

XX Disclosure; Page 62; 106pp; English.



XX Previous immunological analyses of the V3 loop of HIV-1 (AAR621159) have  
 CC localised the main neutralising domains. The target of more than 80% of  
 CC neutralising antibodies in HIV-1 infected sera from AIDS patients has now  
 CC been found to overlap the consensus binding sequence and domain A epitopes  
 CC of the UI snRNP 70K protein. In AIDS, antibody titres are too low to  
 CC arrest the disease; however, the homologous sequences in 70K are  
 CC immunodominant targets of autoantibodies in the systemic rheumatoid  
 CC disorder of mixed connective tissue disease. The titers of such  
 CC autoantibodies exceed 10 power 7. The anti-sRNP autoantibodies will  
 CC cross-react with HIV-1 epitopes and are useful for treating HIV  
 CC infection. (Updated on 25-MAR-2003 to correct OS field.) (Updated on 27-  
 CC AUG-2003 to correct OS field.)  
 XX  
 SQ Sequence 15 AA;  
 Query Match 93.5%; Score 72; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.00051;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQRGPGRAFTVIG 14  
 |||||  
 DB 2 RIQRGPGRAFTVIG 15  
 |||||  
 RESULT 118  
 AAR66427  
 ID AAR66427 standard; peptide; 15 AA.  
 XX  
 AC AAR66427;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 03-AUG-1995 (first entry)  
 XX  
 DE HIV-1 IIIB peptide 18-12.  
 XX  
 KW T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KW cluster peptide; principal neutralising determinant.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9426785-A1.  
 XX  
 PD 24-NOV-1994.  
 XX  
 PF 13-MAY-1994; 94WO-US005142.  
 XX  
 PR 14-MAY-1993; 93US-00060988.  
 XX  
 PA (USSH ) US SEC DEPT HEALTH.  
 XX  
 PI Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
 XX WPI; 1995-006707/01.  
 XX  
 PT Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 XX  
 PS Example 1; Page 33; 120pp; English.  
 XX  
 CC Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC in the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCLUS 3-18 and PCLUS 6-18 (see  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substd. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRAP). In peptide 18-12, the Thr residue at  
 CC position 12 in peptide 18 has been replaced by an Ala residue. (Updated  
 CC on 27-MAR-2003 to correct OS field.)

CC on 25-MAR-2003 to correct PN field.)  
 XX  
 SQ Sequence 15 AA;  
 Query Match 93.5%; Score 72; DB 2; Length 15;  
 Best Local Similarity 93.3%; Pred. No. 0.00051;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 RIQRGPGRAFTVIG 15  
 |||||  
 DB 1 RIQRGPGRAFTVIG 15  
 |||||  
 RESULT 119  
 AAR66428  
 ID AAR66428 standard; peptide; 15 AA.  
 XX  
 AC AAR66428;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 03-AUG-1995 (first entry)  
 XX  
 DE HIV-1 IIIB peptide 18-13.  
 XX  
 KW T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KW cluster peptide; principal neutralising determinant.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9426785-A1.  
 XX  
 PD 24-NOV-1994.  
 XX  
 PF 13-MAY-1994; 94WO-US005142.  
 XX  
 PR 14-MAY-1993; 93US-00060988.  
 XX  
 PA (USSH ) US SEC DEPT HEALTH.  
 XX  
 PI Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
 XX WPI; 1995-006707/01.  
 XX  
 PT Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 XX  
 PS Example 1; Page 33; 120pp; English.  
 XX  
 CC Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC in the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCLUS 3-18 and PCLUS 6-18 (see  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substd. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRAP). In peptide 18-13, the Ile residue at  
 CC position 13 in peptide 18 has been replaced by a Thr residue. (Updated on  
 CC 25-MAR-2003 to correct PN field.)  
 XX  
 SQ Sequence 15 AA;  
 Query Match 93.5%; Score 72; DB 2; Length 15;  
 Best Local Similarity 93.3%; Pred. No. 0.00051;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 RIQRGPGRAFTVIG 15  
 |||||  
 DB 1 RIQRGPGRAFTVIG 15  
 |||||

RESULT 120  
 AAR66426  
 ID AAR66426 standard; peptide; 15 AA.  
 XX  
 AC AAR66426;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 03-AUG-1995 (first entry)  
 XX  
 DE HIV-1 IIIB peptide 18-11.  
 XX  
 KW T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KW cluster peptide; principal neutralising determinant.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9426785-A1.  
 XX  
 PD 24-NOV-1994.  
 XX  
 PF 13-MAY-1994; 94WO-US005142.  
 XX  
 PR 14-MAY-1993; 93US-00060988.  
 XX  
 XX (USSH ) US SEC DEPT HEALTH.  
 XX  
 PA Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
 PI  
 XX WPI; 1995-006707/01.  
 XX  
 XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 XX  
 XX Example 1; Page 33; 120pp; English.  
 XX  
 CC Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC on the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCLUS 3-18 and PCLUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substd. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRF). In peptide 18-11, the Val residue at  
 CC position 11 in peptide 18 has been replaced by a Tyr residue. (Updated on  
 CC 25-MAR-2003 to correct PN field.)  
 XX  
 SQ Sequence 15 AA;  
 Query Match 93.5%; Score 72; DB 2; Length 15;  
 Best Local Similarity 93.3%; Pred. No. 0.00051;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 RIQRGPGRAFTVIGK 15  
 |||||  
 DB 1 RIQRGPGRAFTVIGK 15  
 |||||  
 RESULT 121  
 AAR33236  
 ID AAR33236 standard; peptide; 16 AA.  
 XX  
 AC AAR33236;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 13-JUL-1993 (first entry)  
 XX  
 DE HIV-IIIB gp120 V3 loop epitope peptide RP135.  
 XX

KW HIV-1; human immunodeficiency virus; competition assay; AIDS; infection;  
 KW CD4 binding site; soluble CD4.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9304693-A1.  
 XX  
 PD 18-MAR-1993.  
 XX  
 PF 02-SEP-1992; 92WO-US007511.  
 XX  
 PR 09-SEP-1991; 91US-00756677.  
 PR 20-JUL-1992; 92US-00916542.  
 XX  
 PA (REPK ) REPLIGEN CORP.  
 XX  
 PI Potts BJ, Whiteschaf ME, Field KG, Herlihy WC;  
 XX  
 DR WPI; 1993-100653/12.  
 XX  
 XX Synergistic compen. for treating HIV-1 infection - comprises antibody to  
 PT V3 loop of GP120 and antibody to CD4 binding site of GP120 or soluble CD4  
 PT polypeptide.  
 XX  
 PS Example; Page 20; 56pp; English.  
 XX  
 CC The sequence is that of the HIV-IIIB V3 loop epitope peptide RP135 which  
 CC was used in a competition assay to determine whether a given anti-V3 loop  
 CC antibody will have strong neutralisation activity by itself, and if it  
 CC has potential to act synergistically with a second agent. The assay can  
 CC be used to test for potential neutralisation activity of any anti-V3 loop  
 CC antibody towards any isolate by using a peptide derived from the V3 loop  
 CC from the HIV isolate of interest as the competitor (Updated on 25-MAR-  
 CC 2003 to correct PN field.) (Updated on 25-MAR-2003 to correct PI field.)  
 XX  
 SQ Sequence 16 AA;  
 Query Match 93.5%; Score 72; DB 2; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 0.00054;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQRGPGRAFTVIG 14  
 |||||  
 DB 3 RIQRGPGRAFTVIG 16  
 |||||  
 RESULT 122  
 AAP95348  
 ID AAP95348 standard; peptide; 17 AA.  
 XX  
 AC AAP95348;  
 XX  
 DT 27-AUG-2003 (revised)  
 DT 30-MAR-1992 (first entry)  
 XX  
 DE Variable region V3 sequence found in the envelope protein gp120 of an  
 DE AIDS or ARC causing or related virus.  
 XX  
 KW Vaccine; AIDS; ARC; HIV; diagnosis.  
 XX  
 OS HTLV-IIIB.  
 XX  
 PN EP111219-A.  
 XX  
 PD 12-APR-1989.  
 XX  
 PF 07-OCT-1988; 88EP-00202248.  
 XX  
 PR 09-OCT-1987; 87NL-00002403.  
 XX  
 PA (DIER-) STICHTING CENT DIER.  
 PA (UNAM ) UNIV VAN AMSTERDAM.  
 PA (UYAM-) UNIV AMSTERDAM ZIEKENHUI.

XX Goudsmit J, Meloen RH;  
 XX, WPI; 1989-108193/15.  
 XX Oligopeptide(s) corresp. to beta-turn variable region of gp.120 - used  
 PT for diagnosis of and prodn of vaccines against AIDS and ARC.  
 XX  
 PS Disclosure; Page 3; 7pp; English.  
 XX  
 CC The peptides of the invention comprise the beta-turn AA SQ GPG or GPGR at  
 CC positions 312-314 or 312-315 in the AA numbering of HTLV-IIIB (BH10) and  
 CC flanking AA SQs having a length equal to or greater than 1 and pref.  
 CC equal to or greater than 2 AAs; variants in which the GPG or GPGR SQ has  
 CC been replaced by a different beta-turn SQ; and variants in which the free  
 CC NH2-terminal gp AA and/or the free carboxyl terminal gp. AA has been  
 CC blocked or modified otherwise. (Updated on 27-AUG-2003 to correct OS  
 CC field.)  
 XX  
 XX Sequence 17 AA;  
 SQ  
 Query Match 93.5%; Score 72; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 0.00057; Mismatches 0; Indels 0; Gaps 0;  
 Matches 14; Conservative 0;  
 OY 1 RIQRGPGRAFTVIG 14  
 DB 4 RIQRGPGRAFTVIG 17  
 |||||  
 RESULT 123  
 AAP95349  
 ID AAP95349 standard; peptide; 17 AA.  
 XX  
 AC AAP95349;  
 XX  
 DT 27-AUG-2003 (revised)  
 DT 30-MAR-1992 (first entry)  
 XX  
 DE Variable region V3 found in the envelope protein gp120 of an AIDS or ARC  
 DE, causing or related virus.  
 XX  
 KW Vaccine; AIDS; ARC; HIV; diagnosis.  
 XX  
 OS HTLV-IIIB.  
 XX  
 PN EP311219-A.  
 XX  
 PD 12-APR-1989.  
 XX  
 PF 07-OCT-1988; 88EP-00202248.  
 XX  
 PR 09-OCT-1987; 87NL-00002403.  
 XX  
 PA (DIER-) STICHTING CENT DIER.  
 PA (UNAM) UNIV VAN AMSTERDAM.  
 PA (UYAM-) UNIV AMSTERDAM ZIEKENHUI.  
 XX  
 PI Goudsmit J, Meloen RH;  
 XX  
 DR WPI; 1989-108193/15.  
 XX  
 PT Oligopeptide(s) corresp. to beta-turn variable region of gp.120 - used  
 PT for diagnosis of and prodn of vaccines against AIDS and ARC.  
 XX  
 PS Disclosure; Page 3; 7pp; English.  
 XX  
 CC The peptides of the invention comprise the beta-turn AA SQ GPG or GPGR at  
 CC positions 312-314 or 312-315 in the AA numbering of HTLV-IIIB (BH10) and  
 CC flanking AA SQs having a length equal to or greater than 1 and pref.  
 CC equal to or greater than 2 AAs; variants in which the GPG or GPGR SQ has  
 CC been replaced by a different beta-turn SQ; and variants in which the free  
 CC NH2-terminal gp AA and/or the free carboxyl terminal gp. AA has been

CC blocked or modified otherwise. (Updated on 27-AUG-2003 to correct OS  
 CC field.)  
 XX  
 SQ Sequence 17 AA;  
 Query Match 93.5%; Score 72; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 0.00057; Mismatches 0; Indels 0; Gaps 0;  
 Matches 14; Conservative 0;  
 OY 1 RIQRGPGRAFTVIG 14  
 DB 4 RIQRGPGRAFTVIG 17  
 |||||  
 RESULT 124  
 AAR29241  
 ID AAR29241 standard; peptide; 17 AA.  
 XX  
 AC AAR29241;  
 XX  
 DT 24-OCT-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 14-APR-1993 (first entry)  
 XX  
 DE V3 loop region epitope from IIIB isolate.  
 XX  
 KW V3 loop; gp120; envelope protein; MN; prototype; virus; variant;  
 KW homology; heteroconjugate; enzyme; HIV.  
 XX  
 OS Human immunodeficiency virus; IIIB variant.  
 XX  
 PN WO9220373-A1.  
 XX  
 PD 26-NOV-1992.  
 XX  
 PF 29-APR-1992; 92WO-US003616.  
 XX  
 PR 14-MAY-1991; 91US-00699773.  
 XX  
 PA (REPK) REPLIGEN CORP.  
 XX  
 PI Higgins RJ, Potts BJ;  
 XX  
 DR WPI; 1992-415475/50.  
 XX  
 PT Hetero-conjugate antibodies for treating HIV infections - comprise an  
 PT antibody specific for an effector cell surface antigen and an antibody to  
 PT a V3 loop of GP-120 envelope protein of HIV.  
 XX  
 PS Disclosure; Page 32; 69pp; English.  
 XX  
 CC The sequences given in AAR29237-43 represent a portion of the V3 loop  
 CC region of the gp120 envelope protein of various HIV isolates. These  
 CC sequences can be used to define the specific isolate. All these viral  
 CC variants exhibit complete homology at residues 7-11 of the given sequence  
 CC and at least 36% homology with the remaining 12 amino acids of the  
 CC sequence. Viruses containing these sequences are recognised by the  
 CC heteroconjugate enzyme of the invention. (Updated on 25-MAR-2003 to  
 CC correct PN field.) (Updated on 24-OCT-2003 to standardise OS field)  
 XX  
 XX Sequence 17 AA;  
 Query Match 93.5%; Score 72; DB 2; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 0.00057; Mismatches 0; Indels 0; Gaps 0;  
 Matches 14; Conservative 0;  
 OY 1 RIQRGPGRAFTVIG 14  
 DB 4 RIQRGPGRAFTVIG 17  
 |||||  
 RESULT 125  
 AAR32407

ID AAR32407 standard; peptide; 17 AA.  
 AC AAR32407;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 04-JUL-1993 (first entry)  
 XX  
 DE Sequence of peptide B2 which comprises AAs 312-281 from the V3 region of  
 DE HIV-1 isolate IIB.  
 XX  
 KW HIV-1; vaccine; dendritic core; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9303766-A1.  
 XX  
 PD 04-MAR-1993.  
 XX  
 PF 11-AUG-1992; 92WO-US006688.  
 XX  
 PR 13-AUG-1991; 91US-00744281.  
 XX  
 PA (REP ) REPLIGEN CORP.  
 PA (UVRQ ) UNIV ROCKEFELLER.  
 XX  
 PI Tam JP, Profy AT;  
 XX  
 DR WPI; 1993-093730/11.  
 XX  
 PT New multiple antigen peptide(s) as HIV vaccines - include a dendritic  
 PT core covalently bonded to peptide including the sequence IGPR.  
 XX  
 PS Example; Fig 1; 35pp; English.  
 XX  
 CC Nine peptides from the V3 regions of HIV-1 isolates IIB, RF and MN were  
 CC incorporated into tetraivalent multiple antigen peptide systems (MAPS)  
 CC (see AAR32406-14). Parallel groups of three peptides with chain lengths  
 CC spanning from 11-24 residues were synthesised in MAPS format for each  
 CC isolate. ELIS assays demonstrated that antisera titers in mice were  
 CC closely related to the length of the IIB peptide used for the  
 CC immunisation - the longer the stronger the response. There was no  
 CC subantantial antibody prodn. in mice against the other two series of  
 CC peptides, RF (B4-B6), and MN (B7-B9), except for a low reactivity in the  
 CC sp. immunised with B8 (MN isolate). Specificity tests of the B cell  
 CC response demonstrated that the T cell epitope (AAR32415) also serves as a  
 CC B cell epitope. (Updated on 25-MAR-2003 to correct PN field.)  
 XX  
 SQ Sequence 17 AA;  
 Query Match 93.5%; Score 72; DB 2; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 0.00057;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1 RIQGGPGRAFTVIG 14  
 Db |||||  
 4 RIQGGPGRAFTVIG 17  
 RESULT 126  
 AAR68664  
 ID AAR68664 standard; peptide; 17 AA.  
 XX  
 AC AAR68664;  
 XX  
 DT 16-OCT-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 06-SEP-1995 (first entry)  
 XX  
 DE T cell epitope derived from V3 isolate LAI.  
 XX  
 KW T-cell; epitope; HIV-1; core protein; p24E; B-cell; antigen; gp160; gag;  
 KW pol; vaccine; multimeric peptide; AIDS; 3D organisation.  
 XX

OS Human immunodeficiency virus 1.  
 PN WO9429339-A1.  
 XX  
 PD 22-DEC-1994.  
 XX  
 PF 08-JUN-1994; 94WO-CA000317.  
 XX  
 PR 09-JUN-1993; 93US-00073378.  
 XX  
 PA (CONN-) CONNAUGHT LAB LTD.  
 XX  
 PI Sia CDY, Chong P, Klein MH;  
 XX  
 DR WPI; 1995-036400/05.  
 XX  
 PT Novel tandem synthetic HIV-1 peptide(s) - comprising T-cell epitope of  
 PT gag protein linked to B-cell epitope of V3 loop protein of an HIV-1  
 PT isolate.  
 XX  
 PS Disclosure; Page 39; 69pp; English.  
 XX  
 CC This sequence represents a T-cell epitope derived from the V3 sequence of  
 CC the HIV-1 isolate LAI, which may be linked to a B-cell epitope from the  
 CC V3 (MN) loop from HIV-1. These chimeric peptides may then be used in the  
 CC production of HIV-1 vaccines. These peptide sequences may also be used in  
 CC the production of multimeric peptides in which the peptides are C-  
 CC terminally modified by the addition of a Lys residue which is modified on  
 CC its epsilon amino acid to carry an additional copy of the peptide  
 CC molecule. The linear and multimeric peptides may be used for the  
 CC treatment of AIDS by acting to displace the binding of HIV virus to human  
 CC or animal cells or by disturbing the 3D organisation of the virus.  
 CC (Updated on 25-MAR-2003 to correct PN field.) (Updated on 16-OCT-2003 to  
 CC standardise OS field)  
 XX  
 SQ Sequence 17 AA;  
 Query Match 93.5%; Score 72; DB 2; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 0.00057;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1 RIQGGPGRAFTVIG 14  
 Db |||||  
 4 RIQGGPGRAFTVIG 17  
 RESULT 127  
 AAW25834  
 ID AAW25834 standard; peptide; 17 AA.  
 XX  
 AC AAW25834;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 20-OCT-1997 (first entry)  
 XX  
 DE HIV B-cell strain LAI env protein V3 loop peptide.  
 XX  
 KW HIV; human immunodeficiency virus; gag; T-cell; B-cell; epitope; env;  
 KW V3 loop; vaccine; determinant; chimeric.  
 XX  
 OS Synthetic.  
 XX  
 PN US5639854-A.  
 XX  
 PD 17-JUN-1997.  
 XX  
 PF 09-JUN-1994; 94US-00257528.  
 XX  
 PR 09-JUN-1993; 93US-00073378.  
 XX  
 PA (CONN-) CONNAUGHT LAB LTD.  
 XX  
 PI Klein MH, Sia CDY, Chong P;

XX DR WPI; 1997-332082/30.  
 XX PT Tandem synthetic HIV peptide(s) useful as immunogens - comprising gag  
 XX PT protein T-cell epitope linked to env protein B-cell epitope.  
 XX PS Disclosure; Col 21; 41pp; English.  
 XX CC The invention relates to new synthetic peptides comprising at least one  
 CC amino acid sequence comprising an HIV gag protein T-cell epitope linked  
 CC at its C- or N-terminus to an amino acid sequence comprising a B-cell  
 CC epitope of the V3 loop of an HIV env protein, which can be used to  
 CC generate vaccines against HIV-1. The T-cell epitope sequence is pref.  
 CC selected from the T-helper determinant core peptides P24E, P24N, P24L,  
 CC P24M and P24H while the B-cell epitopes are derived from HIV strains  
 CC including CTLB-56, V3MN, CTLB-29, CTLB-55, SF2, LAI, IIB, RF, Z6, 2054,  
 CC 1714 and BX08. The peptides are chimeric and can be linked to a branched  
 CC Lys backbone. This sequence represents the B-cell env protein V3 loop  
 CC peptide from HIV-1 strain LAI. (Updated on 25-MAR-2003 to correct PF  
 CC field.)  
 XX CC  
 XX SQ Sequence 17 AA;  
 Query Match 93.5%; Score 72; DB 2; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 0.00057;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQGPGRFVFTIG 14  
 Db |||||  
 4 RIQGPGRFVFTIG 17  
 RESULT 128  
 AAW76848  
 ID AAW76848 standard; peptide; 17 AA.  
 AC AAW76848;  
 XX  
 XX 25-JAN-1999 (first entry)  
 DT Fusion immunoglobulin heavy chain HIV gp120 B cell epitope #18.  
 DE B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IGH;  
 KW human immune deficiency virus; HIV; tolerance; treatment; therapy;  
 KW prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;  
 KW microbial infection; autoimmune disease; antibody; apoptosis;  
 KW antiviral T cell immunity.  
 XX OS Mus sp.  
 OS Homo sapiens.  
 XX WO9836087-A1.  
 PN 20-AUG-1998.  
 PD 13-FEB-1998; 98WO-US002766.  
 XX PF 13-FEB-1997; 97US-0040581P.  
 XX PR (AMNA-) AMERICAN NAT RED CROSS.  
 XX PA Scott D, Zambidis E;  
 PI WPI; 1998-506315/43.  
 XX DR New fusion immunoglobulin heavy chain including gp120 epitopes and  
 XX PT related complete antibodies - DNA, vectors and transformed cells, used to  
 XX PT induce tolerance to the epitopes for treatment of human immune deficiency  
 XX PT virus infection.  
 XX PS Claim 10; Page 119; 154pp; English.  
 XX CC This sequence is an epitope used in the construction of a novel fusion

CC immunoglobulin heavy chain (IGH) protein with a mammalian, especially  
 CC human, IGH chain fused in frame at its N-terminus to one or more human  
 CC immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or  
 CC transduced cells are used to tolerate subjects to gp120 epitopes and to  
 CC maintain this tolerance, particularly for treatment of HIV infection,  
 CC optionally together with other therapeutic/prophylactic agents such as  
 CC vaccines, chemotherapeutic agents and immune response modifiers. Such  
 CC proteins can be used against other diseases where an immune response is  
 CC deleterious, e.g. microbial infection, tumours or autoimmune disease.  
 CC Induction of tolerance suppresses production of antibodies against gp120,  
 CC so prevents or inhibits 'bystander' apoptosis of uninfected T cells that  
 CC are bound to gp120 protein, maximising induction of protective antiviral  
 CC T cell immunity  
 XX SQ Sequence 17 AA;  
 Query Match 93.5%; Score 72; DB 2; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 0.00057;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQGPGRFVFTIG 14  
 Db |||||  
 4 RIQGPGRFVFTIG 17  
 RESULT 129  
 AAW67350  
 ID AAW67350 standard; peptide; 17 AA.  
 AC AAW67350;  
 XX  
 XX 17-OCT-2003 (revised)  
 DT 25-JAN-1999 (first entry)  
 DE HIV-1 strain LAI gp120 V3 loop epitope peptide.  
 XX Immunogen; vaccine; HIV-1; T-cell; B-cell; epitope; core protein; gp120;  
 KW V3 loop.  
 KW Human immunodeficiency virus 1.  
 XX OS US5817754-A.  
 PN 06-OCT-1998.  
 XX PF 05-JUN-1995; 95US-00464329.  
 XX PR 09-JUN-1993; 93US-00073378.  
 XX PR 09-JUN-1994; 94US-00257528.  
 XX PA (CONN-) CONNAUGHT LAB LTD.  
 XX Chong P, Klein MH, Sia CDY;  
 PI WPI; 1998-556461/47.  
 XX Synthetic human immunodeficiency virus-1 peptide(s) - containing T-cell  
 XX epitope and B-cell epitope(s) are candidate vaccines against HIV-1.  
 XX Disclosure; Col 21; 40pp; English.  
 XX The invention relates to a novel immunogenic composition for use in  
 CC vaccines for the treatment of HIV-1 comprising an HIV-1-derived T-cell  
 CC epitope linked to an HIV-1-derived B-cell epitope. The T-cell epitopes  
 CC are generally designed based on the p24 core protein and the B-cell  
 CC epitopes from the V3 loop of the gp120 protein from various HIV-1  
 CC strains. This peptide represents the V3 loop epitope from the HIV-1  
 CC strain LAI. (Updated on 17-OCT-2003 to standardise OS field)  
 XX SQ Sequence 17 AA;  
 Query Match 93.5%; Score 72; DB 2; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 0.00057;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIG 14  
 |||||  
 Db 4 RIQRGPGRAFTVIG 17

## RESULT 130

AAW99958  
 ID AAW99958 standard; peptide; 17 AA.

XX  
 AC AAW99958;

XX 05-MAY-1999 (first entry)

DE HIV-1 vaccine synthetic peptide SEQ ID NO:35.

KW HIV-1; human immunodeficiency virus; vaccine; T-cell epitope;  
 KW gag protein; B-cell epitope; gp41 protein; chimeric; infection.

XX Synthetic.

OS Human immunodeficiency virus 1.

XX US5876731-A.

XX 02-MAR-1999.

XX 05-JUN-1995; 95US-00462507.

XX 09-JUN-1993; 93US-00073378.

XX 09-JUN-1994; 94US-00257528.

XX (CONN-) CONNAUGHT LAB LTD.

XX Chong P, Klein MH, Sia CDY;

XX WPI; 1999-189590/16.

XX Synthetic chimeric HIV polypeptides - comprising gag protein T-cell  
 PT epitope linked to gp41 B-cell epitope.

XX Example 1; Col 41-42; 41pp; English.

XX The present invention describes a synthetic peptide comprising an amino  
 CC acid sequence containing a T-cell epitope of an HIV gag protein linked at  
 CC its C terminus to an amino acid sequence containing a B-cell epitope of  
 CC an HIV gp41 protein and containing the amino acid sequence: XLKDWX2;  
 CC where X1 = E, A, G or Q, and X2 = A or T, or an amino acid sequence  
 CC capable of eliciting an HIV-specific antiserum and recognizing the  
 CC sequence XLKDWX2. The synthetic peptide is useful in vaccines against  
 CC HIV infection and in diagnostic applications. AAW98892 to AAW98906, and  
 CC AAW99899 to AAW99989 represent synthetic peptides from the present  
 CC invention

XX Sequence 17 AA;

Query Match 93.5%; Score 72; DB 2; Length 17;

Best Local Similarity 100.0%; Pred. No. 0.00057;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIG 14  
 |||||  
 Db 4 RIQRGPGRAFTVIG 17

## RESULT 131

AAV39756

ID AAV39756 standard; peptide; 17 AA.

XX AAV39756;

XX 17-OCT-2003 (revised)

DT 26-NOV-1999 (first entry)

XX HIV1 chimeric peptide V3-LAI.

XX HIV; vaccine; immunogenic composition; T cell epitope; B cell epitope;  
 KW infection; antibody; antiviral.

XX Human immunodeficiency virus 1.

XX US5951986-A.

XX 14-SEP-1999.

XX 06-JUN-1995; 95US-00467881.

XX 09-JUN-1993; 93US-00073378.

XX 09-JUN-1994; 94US-00257528.

XX (CONN-) CONNAUGHT LAB LTD.

XX Klein MH, Chong P, Sia CDY;

XX WPI; 1999-550482/46.

XX Immunogenic composition containing synthetic fusion polypeptides  
 PT containing both the T and B cell epitopes of the human immunodeficiency  
 PT virus, useful antigens in producing vaccines.

XX Example 1; Col 22; 43pp; English.

XX This sequence represents a fragment of a HIV1 protein, and can be used in  
 CC the immunogenic composition of the invention. The composition comprises a  
 CC synthetic fusion polypeptide which includes a sequence encoding 1 or more  
 CC T cell epitopes and a sequence encoding 1 or more B cell epitopes and a  
 CC carrier. Both the T cell and B cell epitopes are derived from HIV  
 CC proteins. The compositions are useful as vaccines against HIV infection.  
 CC The composition induces HIV-1-specific polyclonal antibodies that are  
 CC opsonising and antiviral. The peptide components may be selected to  
 CC induce a response against different viral isolates and in subjects who  
 CC recognise different T cell epitopes. (Updated on 17-OCT-2003 to  
 CC standardise OS field)

XX Sequence 17 AA;

Query Match 93.5%; Score 72; DB 2; Length 17;

Best Local Similarity 100.0%; Pred. No. 0.00057;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIG 14  
 |||||  
 Db 4 RIQRGPGRAFTVIG 17

## RESULT 132

ADN14075

ID ADN14075 standard; peptide; 17 AA.

XX ADN14075;

DT 17-JUN-2004 (first entry)

XX HIV helper T cell epitope #42.

XX HIV; antigen; epitope; T cell; MHC; major histocompatibility complex;  
 KW CTL; cytotoxic T lymphocyte; HIV infection; cancer; tuberculosis; tumour;  
 KW hepatitis; melanoma; breast cancer; Hodgkin lymphoma;  
 KW nasopharyngeal carcinoma; vaccine; immune response; hyaluronic acid; HA;  
 KW CD8+ T cell; CD4+ T cell; viral infection; bacterial infection;  
 KW fungal infection; parasitic infection.

XX Human immunodeficiency virus 1.

XX US2003049253-A1.



CC in an infected subject. The present sequence represents a peptide used in  
 CC the exemplification of the present invention.

SQ Sequence 17 AA;

Query Match 93.5%; Score 72; DB 8; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 0.00057;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGPAFTVIG 14  
 |||||  
 Db 4 RIQPGGPAFTVIG 17  
 |||||

RESULT 134

AAAR38526  
 ID AAR38526 standard; peptide; 18 AA.

XX AC AAR38526;

XX XX 25-MAR-2003 (revised)

DT DT 21-DEC-1993 (first entry)

XX DE Cyclic HIV PND peptide cPND535.

XX Cyclic; HIV; principle neutralising determinant; PND; conjugate;  
 KW immunological carrier; antipeptide; anti-HIV; HIV-neutralising; antibody;  
 KW vaccine; immune response.

XX OS Synthetic.

XX FH Key Location/Qualifiers

FT Modified-site 1 /note= "Alpha amino group forms a cyclic peptide by  
 FT condensing to the C-terminal of Gly18"

FT Misc-difference 2 /label= OTHER

FT FT Modified-site 18 /note= "Abu = gamma aminobutyric acid"

FT FT /note= "C-terminal condensed to the N-terminal of Lys1 to  
 FT form cyclic peptide"

XX PN EP551689-A2.

XX XX 21-JUL-1993.

XX PF 10-JAN-1992; 92EP-00300243.

XX PR 19-DEC-1991; 91US-00807943.

XX PA (MERI ) MERCK & CO INC.

XX PI Bednarek MA, Tolman RL;

XX DR WPI; 1993-228557/29.

XX Cyclic HIV principal neutralising determinant (PND) peptide(s) - useful  
 PT as vaccines for treating and preventing HIV-mediated diseases e.g. AIDS  
 PT and ARC.

XX PS Claim 3; Page 26; 27pp; English.

XX The sequences given in AAR38520-26 are cyclic HIV principle neutralising  
 CC determinant (PND) peptides. They are stable compounds which, when  
 CC conjugated with an immunological carrier, may be used to raise  
 CC antipeptide, anti-HIV and HIV-neutralising antibodies. These may be used  
 CC in vaccines for prevention or treatment of HIV-related diseases. They may  
 CC also be used as reagents in the study of structure/function relationships  
 CC in induction of HIV-neutralising immune response. (Updated on 25-MAR-2003  
 CC to correct PN field.)

XX SQ Sequence 18 AA;

Query Match 93.5%; Score 72; DB 2; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 0.0006;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Query Match 93.5%; Score 72; DB 2; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 0.0006;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQPGGPAFTVIG 14  
 |||||  
 Db 5 RIQPGGPAFTVIG 18  
 |||||

RESULT 135

AAW03404  
 ID AAW03404 standard; peptide; 18 AA.

XX AC AAW03404;

XX DT 10-OCT-1996 (first entry)

XX DE HIV principal neutralising determinant cPND535.

XX conjugate; PND; HIV; principal neutralizing determinant; OMPC;  
 KW outer membrane protein complex; anionic spacer; vaccine;  
 KW human immunodeficiency virus; water-soluble.

XX OS Synthetic.

XX FH Key Location/Qualifiers

FT Modified-site 1 /label= cycle

FT /note= "one amino group of this lysine residue is linked  
 FT to Neisseria meningitidis OMPC via a specified anionic  
 FT spacer group; and the other forms a peptide bond with the  
 FT terminal carboxy group of Gly(18), giving a cyclic  
 FT peptide"

FT Modified-site 2 /label= Abu

FT Modified-site 18 /note= "the carboxy group is condensed onto an amino of  
 FT Lys(1). See above"

XX PN GB2271995-A.

XX PD 04-MAY-1994.

XX PF 12-OCT-1993; 93GB-00020943.

XX PR 15-OCT-1992; 92US-00963327.

XX PA (MERI ) MERCK & CO INC.

XX PI Tolman RL, Marburg S, Leanza WL, Lombardo VK;

XX DR WPI; 1994-128412/16.

XX New conjugates of outer membrane protein and HIV epitope - for generating  
 PT HIV-neutralising response, have components joined by anionic spacer to  
 PT ensure solubility of prod.

XX PS Claim 10; Page 70; 73pp; English.

XX A new conjugate immunogen comprises (a) the OMPC of Neisseria  
 CC meningitidis b as a protein carrier, (b) a principal neutralizing  
 CC determinant (PND) of HIV as a peptidyl epitope against which immune  
 CC responses are desired, and (c) a low mol. wt. anionic spacer linking (a)  
 CC and (b). The conjugate is water-soluble, yet can carry a high peptide  
 CC epitope loading. It is useful as a vaccine against HIV. The present  
 CC sequence is an example of a PND used in the conjugate

XX SQ Sequence 18 AA;



OY 1 RIQGPGRFAFTVIG 14  
 DB 5 RIQGPGRFAFTVIG 18  
 RESULT 136  
 ADRI8878  
 ID ADRI8878 standard; peptide; 18 AA.  
 AC  
 AC ADRI8878;  
 XX  
 DT 04-NOV-2004 (first entry)  
 XX  
 DE HIV-1 V3-IIIIB peptide SEQ ID NO:4.  
 KW three-dimensional atomic structural conformation;  
 KW protein co-ordinate data; V3 loop peptide; HIV-1; envelope glycoprotein;  
 KW gp120; human monoclonal antibody 447-52D;  
 KW murine monoclonal antibody 0.5 beta; immunogen; immunogenic;  
 KW V3 loop epitope; HIV-1 infectivity inhibitor; anti-HIV; vaccine;  
 KW HIV-1 infection.  
 OS Human immunodeficiency virus 1.  
 OS Synthetic.  
 XX  
 FN WO2004069863-A2.  
 XX  
 PD 19-AUG-2004.  
 XX  
 PF 04-FEB-2004; 2004WO-US003304.  
 XX  
 PR 04-FEB-2003; 2003US-0444682P.  
 XX  
 PA (UNYNY ) UNIV NEW YORK STATE.  
 PA (YEDA ) YEDA RES & DEV CO LTD.  
 XX  
 FI Anglistier J, Sharon M, Schapira M, Zolla-Pazner S, Rosen O;  
 XX WPI; 2004-625447/60.  
 DR  
 XX  
 PT Composition for inhibiting HIV-1 infection, comprises isolated peptide  
 PT molecule that mimics atomic structural conformation of V3 loop peptide of  
 PT HIV-1 envelope glycoprotein that is bound to, and constrained by human  
 PT monoclonal antibody.  
 XX  
 PS Disclosure; SEQ ID NO 4; 127pp; English.  
 XX  
 CC The present invention describes a composition (C1) which comprises an  
 CC isolated peptide molecule or isostere that mimics the three-dimensional  
 CC (3D) atomic structural conformation of the V3 loop peptide of the HIV-1  
 CC envelope glycoprotein gp120 that is bound to, and constrained by, human  
 CC monoclonal antibody (MAB) 447-52D, murine MAb 0.5 beta or an antigen  
 CC binding fragment of the MAB, where the constrained V3 loop peptide  
 CC differs in conformation from the same V3 loop peptide when it is in free  
 CC form. Also described: (1) identifying (M1) from several existing  
 CC compounds a molecule that is useful as an HIV-1 V3 loop immunogen or as  
 CC an inhibitor of binding of HIV-1 to a chemokine receptor/HIV-1 co-  
 CC receptor on the surface of a receptor-bearing target cell; (2) designing  
 CC a molecule that is useful as an HIV-1 V3 loop immunogen or as an  
 CC inhibitor of binding of HIV-1 to a chemokine receptor/HIV-1 co-receptor  
 CC on the surface of a receptor-bearing target cell; (3) a composition (C2)  
 CC that is useful as an HIV-1 V3 loop immunogen or as an inhibitor of  
 CC binding of HIV-1 to a chemokine receptor/HIV-1 co-receptor on the surface  
 CC of a receptor-bearing target cell; (4) an immunogenic composition (C3)  
 CC for induction of an anti-HIV-1 antibody response specific for a V3 loop  
 CC epitope, comprising (C1) and an excipient; (5) a pharmaceutical  
 CC composition (C4) useful for blocking the interaction of HIV-1 with an R5  
 CC or X4 co-receptor and thereby inhibiting HIV-1 infectivity, comprising  
 CC (C1) and a carrier or excipient; (6) a computing platform for generating  
 CC a 3D model of a constrained HIV V3 view peptide; (7) a computer generated  
 CC model representing the conformationally constrained structure of a V3  
 CC loop peptide that is bound to 447-52D or 0.5beta MAB or its antigen  
 CC binding fragments, comprising a 3D atomic structure defined by NC; and

CC (8) a computer readable medium (CM) comprising, in a retrievable format,  
 CC data that includes a set of structure coordinates defined a 3D structure  
 CC of a V3 loop peptide that is conformationally constrained by being bound  
 CC to 447-52D or 0.5beta MAB or its antigen binding fragment. (C1) has anti-  
 CC HIV activities, and can be used in vaccines, and as an inhibitor of  
 CC binding of HIV-1 to chemokine receptor/HIV-1 co-receptor. (C1) is useful  
 CC for in vivo inhibition of HIV-1 infection. (C1) or (C2) is useful for  
 CC producing a medicament utilised for treating or preventing HIV-1  
 CC infection. (C3) or (C4) is useful for inducing in a subject an anti-HIV-1  
 CC neutralising antibody response specific for a V3 loop epitope. (C4) is  
 CC useful for preventing an HIV-1 infection in an uninfected subject at risk  
 CC for such infection or for inhibiting viral spread and disease progression  
 CC in an infected subject. The present sequence represents a peptide used in  
 CC the exemplification of the present invention.  
 XX  
 SQ Sequence 18 AA;  
 Query Match 93.5%; Score 72; DB 8; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 0.0006;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 1 RIQGPGRFAFTVIG 14  
 DB 5 RIQGPGRFAFTVIG 18  
 RESULT 137  
 AAR25471  
 ID AAR25471 standard; protein; 20 AA.  
 XX  
 AC AAR25471;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 15-JAN-1993 (first entry)  
 XX  
 DE V3 loop structure.  
 XX  
 KW Hepatitis B; surface antigen; AIDS; cytotoxic lymphocytes;  
 KW disulphide loop; variable region.  
 OS Synthetic.  
 XX  
 PN WO9211291-A1.  
 XX  
 PD 09-JUL-1992.  
 XX  
 PF 16-DEC-1991; 91WO-EP002422.  
 XX  
 PR 20-DEC-1990; 90GB-00027623.  
 PR 21-MAR-1991; 91GB-00005993.  
 XX  
 PA (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.  
 PI Van Wijnendale F, Baijot M, Prieels J;  
 XX WPI; 1992-250032/30.  
 DR  
 PT New immunogenic hybrid polypeptide(s) for vaccine formulations - comprise  
 PT S antigen of hepatitis B linked via spacer to heterologous antigen, e.g.  
 PT SD from HSV or gp120 form HIV.  
 XX  
 PS Disclosure; Page 28; 38pp; English.  
 XX  
 CC The peptide sequence given represents the sequence from amino acid 310-  
 CC 328 of the external protein gp120 from HIV. This comprises a disulphide  
 CC loop in the third variable region. It was used in an example of the  
 CC invention and was incorporated into hepatitis B surface antigen (HBsAg)  
 CC particles. The hybrid formed in this reaction is useful as a vaccine for  
 CC the prophylactic treatment of various infectious diseases eg. AIDS.  
 CC Conjugation of this peptide with the HBsAg particle allows its processing  
 CC to be directed via a non-endosomal route. In this way the gp120 fragment  
 CC can be recognized by cytotoxic lymphocytes. (Updated on 25-MAR-2003 to  
 CC correct PN field.)

```
XX SQ Sequence 20 AA;
Query Match 93.5%; Score 72; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.00066;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRFVITG 14
DB 7 RIQGPGRFVITG 20
|||||

RESULT 138
AAW76842
ID AAW76842 standard; peptide; 20 AA.
XX
AC AAW76842;
XX
DT 25-JAN-1999 (first entry)
XX
DE Fusion immunoglobulin heavy chain HIV gp120 B cell epitope #12.
XX
KW B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IgH;
KW human immune deficiency virus; HIV; tolerance; treatment; therapy;
KW prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;
KW microbial infection; autoimmune disease; antibody; apoptosis;
KW antiviral T cell immunity.
XX
OS Mus sp.
XX
OS Homo sapiens.
XX
PN WO9836087-A1.
XX
PD 20-AUG-1998.
XX
PF 13-FEB-1998; 98WO-US002766.
XX
PR 13-FEB-1997; 97US-0040581P.
XX
PA (AMNA-) AMERICAN NAT RED CROSS.
XX
PI Scott D, Zambidis E;
XX
DR WPI; 1998-506315/43.
XX
PT New fusion immunoglobulin heavy chain including gp120 epitopes and
PT related complete antibodies - DNA, vectors and transformed cells, used to
PT induce tolerance to the epitopes for treatment of human immune deficiency
PT virus infection.
XX
PS Claim 10; Page 119; 154pp; English.
XX
CC This sequence is an epitope used in the construction of a novel fusion
CC immunoglobulin heavy chain (IGH) protein with a mammalian, especially
CC human, IGH chain fused in frame at its N-terminus to one or more human
CC immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or
CC transfectected cells are used to tolerate subjects to gp120 epitopes and to
CC maintain this tolerance, particularly for treatment of HIV infection,
CC optionally together with other therapeutic/prophylactic agents such as
CC vaccines, chemotherapeutic agents and immune response modifiers. Such
CC proteins can be used against other diseases where an immune response is
CC deleterious, e.g. microbial infection, tumours or autoimmune disease.
CC Induction of tolerance suppresses production of antibodies against gp120,
CC so prevents or inhibits 'bystander' apoptosis of uninfected T cells that
CC are bound to gp120 protein, maximising induction of protective antiviral
CC T cell immunity
XX SQ Sequence 20 AA;
Query Match 93.5%; Score 72; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.00066;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRFVITG 14
DB 7 RIQGPGRFVITG 20
|||||

RESULT 139
ABP57070
ID ABP57070 standard; peptide; 20 AA.
XX
AC ABP57070;
XX
DT 23-OCT-2003 (revised)
DT 14-APR-2003 (first entry)
XX
DE HIV gp120 V3 loop derived peptide ARP740/28.
XX
KW Anti-human leukocyte antigen antibody; anti-HLA antibody; anti-HIV;
KW proliferative immune response; antiinflammatory; neuroprotective;
KW cytostatic; gene therapy; vaccine; inflammatory disease; nerve damage;
KW autoimmune disease; axonal damage; cancer; inflammatory; HIV.
XX
OS Human immunodeficiency virus 1.
XX
PN WO2003004049-A2.
XX
PD 16-JAN-2003.
XX
PF 02-JUL-2002; 2002WO-GB003037.
XX
PR 02-JUL-2001; 2001GB-00016151.
PR 29-NOV-2001; 2001GB-00028638.
PR 28-JAN-2002; 2002GB-00001896.
PR 28-MAR-2002; 2002GB-00007509.
XX
PA (ICEB-) ICE BIOLOGICS LTD.
XX
PI Dalgleish AG, Cadogan M, Heeney J, White SDT;
XX
DR WPI; 2003-210314/20.
XX
PT Use of anti-HLA antibody for the preparation of a medicament for treating
PT a disease involving a proliferative immune response e.g. HIV,
PT inflammatory diseases, autoimmune diseases, axonal/nerve damage or
PT related impairment, cancers.
XX
PS Example; Page 41; 69pp; English.
XX
CC The present invention describes an anti-human leukocyte antigen (HLA)
CC antibody (I) useful for the preparation of a medicament for treating a
CC disease involving a proliferative immune response. (I) has anti-HIV,
CC antiinflammatory, neuroprotective and cytostatic activities, and can be
CC used in vaccines and in gene therapy. The antibody (I) is useful for the
CC preparation of a medicament for treating diseases involving a
CC proliferative immune response, e.g. HIV, inflammatory diseases,
CC autoimmune diseases, axonal or nerve damage or related impairment or
CC cancers, and other diseases or conditions with an inflammatory component.
CC The present sequence represents an HIV gp120 V3 loop derived peptide,
CC which is used in the exemplification of the present invention. (Updated
CC on 23-OCT-2003 to standardise OS field)
XX SQ Sequence 20 AA;
Query Match 93.5%; Score 72; DB 6; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.00066;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRFVITG 14
DB 7 RIQGPGRFVITG 20
|||||

RESULT 140
AAR66425
```

ID AAR66425 standard; peptide; 15 AA.  
 AC AAR66425;  
 DT 25-MAR-2003 (revised)  
 DT 03-AUG-1995 (first entry)  
 XX  
 DE HIV-1 IIIB peptide 18-10.  
 XX  
 KW T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KW cluster peptide; principal neutralising determinant.  
 XX  
 OS Synthetic.  
 XX  
 XX WO9426785-A1.  
 XX  
 PD 24-NOV-1994.  
 XX  
 XX 13-MAY-1994; 94WO-US005142.  
 PF  
 XX 14-MAY-1993; 93US-00060988.  
 PR  
 XX (USSH ) US SEC DEPT HEALTH.  
 PA  
 XX Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
 PI WPI; 1995-006707/01.  
 XX  
 XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 XX  
 PS Example 1; Page 33; 120pp; English.  
 XX  
 CC Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC in the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCUS 3-18 and PCUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substd. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRAP). In peptide 18-10, the Phe residue at  
 CC position 10 in peptide 18 has been replaced by a Ile residue. (Updated on  
 CC 25-MAR-2003 to correct PN field.)  
 XX  
 SQ Sequence 15 AA;  
 Query Match 92.2%; Score 71; DB 2; Length 15;  
 Best Local Similarity 93.3%; Pred. No. 0.00072;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 RIQRGPGRAFTVIGK 15  
 Db |||||  
 1 RIQRGPGRAFTVIGK 15  
 RESULT 141  
 AAR66420  
 ID AAR66420 standard; peptide; 15 AA.  
 XX  
 AC AAR66420;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 03-AUG-1995 (first entry)  
 XX  
 DE HIV-1 IIIB peptide 18-5.  
 XX  
 KW T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KW cluster peptide; principal neutralising determinant.

XX Synthetic.  
 OS WO9426785-A1.  
 PN 24-NOV-1994.  
 PD  
 XX 13-MAY-1994; 94WO-US005142.  
 PF  
 XX 14-MAY-1993; 93US-00060988.  
 PR  
 XX (USSH ) US SEC DEPT HEALTH.  
 PA  
 XX Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
 PI WPI; 1995-006707/01.  
 XX  
 XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 XX  
 PS Example 1; Page 33; 120pp; English.  
 XX  
 CC Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC in the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCUS 3-18 and PCUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substd. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRAP). In peptide 18-5, the Gly residue at  
 CC position 5 in peptide 18 has been replaced by an Ala residue. (Updated on  
 CC 25-MAR-2003 to correct PN field.)  
 XX  
 SQ Sequence 15 AA;  
 Query Match 92.2%; Score 71; DB 2; Length 15;  
 Best Local Similarity 93.3%; Pred. No. 0.00072;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 RIQRGPGRAFTVIGK 15  
 Db |||||  
 1 RIQRGPGRAFTVIGK 15  
 RESULT 142  
 AAR66429  
 ID AAR66429 standard; peptide; 15 AA.  
 XX  
 AC AAR66429;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 03-AUG-1995 (first entry)  
 XX  
 DE HIV-1 IIIB peptide 18-14.  
 XX  
 KW T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KW cluster peptide; principal neutralising determinant.  
 XX  
 OS Synthetic.  
 XX  
 XX WO9426785-A1.  
 XX  
 PD 24-NOV-1994.  
 XX  
 XX 13-MAY-1994; 94WO-US005142.  
 PF  
 XX 14-MAY-1993; 93US-00060988.  
 PR  
 XX (USSH ) US SEC DEPT HEALTH.  
 PA

XX Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
 XX WPI; 1995-006707/01.  
 XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 XX Example 1; Page 33; 120pp; English.  
 XX Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC in the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCLUS 3-18 and PCLUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substd. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRAF). In peptide 18-14, the Gly residue at  
 CC position 14 in peptide 18 has been replaced by an Ala residue. (Updated  
 CC on 25-MAR-2003 to correct PN field.)  
 XX Sequence 15 AA;  
 XX  
 XX Query Match 92.2%; Score 71; DB 2; Length 15;  
 XX Best Local Similarity 93.3%; Pred. No. 0.00072;  
 XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 RIQRGPGRAFTVIGK 15  
 DB ||||| |||||  
 1 RIQRGPGRAFTVIGK 15

RESULT 143  
 AAR66423  
 ID AAR66423 standard; peptide; 15 AA.  
 XX  
 XX AAR66423;  
 XX  
 XX 25-MAR-2003 (revised)  
 DT 03-AUG-1995 (first entry)  
 XX  
 XX HIV-1 IIIB peptide 18-8.  
 XX  
 XX T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KW cluster peptide; principal neutralising determinant.  
 KW  
 XX Synthetic.  
 OS  
 XX WO9426785-A1.  
 PN  
 XX 24-NOV-1994.  
 PD  
 XX  
 XX 13-MAY-1994; 94WO-US005142.  
 PF  
 XX 14-MAY-1993; 93US-00060988.  
 PR  
 XX (USSH ) US SEC DEPT HEALTH.  
 PA  
 XX Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
 XX WPI; 1995-006707/01.  
 XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 XX Example 1; Page 33; 120pp; English.  
 XX Single residues from the HIV-1 RF sequence (AAR66415) replaced residues

CC in the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCLUS 3-18 and PCLUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substd. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRAF). In peptide 18-8, the Arg residue at  
 CC position 8 in peptide 18 has been replaced by an Ala residue. (Updated on  
 CC 25-MAR-2003 to correct PN field.)  
 XX Sequence 15 AA;  
 XX  
 XX Query Match 92.2%; Score 71; DB 2; Length 15;  
 XX Best Local Similarity 93.3%; Pred. No. 0.00072;  
 XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 RIQRGPGRAFTVIGK 15  
 DB ||||| |||||  
 1 RIQRGPGRAFTVIGK 15

RESULT 144  
 AAR66422  
 ID AAR66422 standard; peptide; 15 AA.  
 XX  
 XX AAR66422;  
 XX  
 XX 25-MAR-2003 (revised)  
 DT 03-AUG-1995 (first entry)  
 XX  
 XX HIV-1 IIIB peptide 18-7.  
 XX  
 XX T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KW cluster peptide; principal neutralising determinant.  
 KW  
 XX Synthetic.  
 OS  
 XX WO9426785-A1.  
 PN  
 XX 24-NOV-1994.  
 PD  
 XX  
 XX 13-MAY-1994; 94WO-US005142.  
 PF  
 XX 14-MAY-1993; 93US-00060988.  
 PR  
 XX (USSH ) US SEC DEPT HEALTH.  
 PA  
 XX Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
 XX WPI; 1995-006707/01.  
 XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 XX Example 1; Page 33; 120pp; English.  
 XX Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC in the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCLUS 3-18 and PCLUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substd. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRAF). In peptide 18-7, the Gly residue at  
 CC position 7 in peptide 18 has been replaced by an Ala residue. (Updated on  
 CC 25-MAR-2003 to correct PN field.)  
 XX

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SQ Sequence 15 AA;
  Query Match      92.2%; Score 71; DB 2; Length 15;
  Best Local Similarity 93.3%; Pred. No. 0.00072;
  Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQRGPGRAFTVIGK 15
    ||||| |||||
Db 1 RIQRGPARAFVTIGK 15

RESULT 145
AAW66421
ID AAR66421 standard; peptide; 15 AA.
XX
AC AAR66421;
XX
XX 25-MAR-2003 (revised)
DT 03-AUG-1995 (first entry)
XX
XX HIV-1 IIIB peptide 18-6.
XX
XX T cell helper site; cytotoxic T cell response; neutralising antibody;
KW human immunodeficiency virus type 1; envelope glycoprotein gp120;
KW cluster peptide; principal neutralising determinant.
XX
XX Synthetic.
XX
XX WO9426785-A1.
XX
XX 24-NOV-1994.
XX
XX 13-MAY-1994; 94WO-US005142.
XX
XX 14-MAY-1993; 93US-00060988.
XX
XX (USSH ) US SEC DEPT HEALTH.
XX
XX Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;
XX WPI; 1995-006707/01.
XX
XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies
PT responses - to target antigen in hosts of different MHC haplotypes, esp.
PT for therapeutic or prophylactic vaccines against HIV.
XX
XX Example 1; Page 33; 120pp; English.
XX
XX Single residues from the HIV-1 RP sequence (AAR66415) replaced residues
CC in the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue
CC on the binding of neutralising and non-neutralising sera from animals
CC immunised with the cluster peptides PCLUS 3-18 and PCLUS 6-18 (see
CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-
CC R66430) showed that binding was enhanced over peptide 18 control when a
CC tyrosine was substd. for a Val at position 11 and substns. at positions
CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of
CC sera was reduced when substns. were made in the principal neutralising
CC determinant sequence (PGRAP). In peptide 18-6, the Pro residue at
CC position 6 in peptide 18 has been replaced by an Ala residue. (Updated on
CC 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 15 AA;
  Query Match      89.6%; Score 69; DB 2; Length 15;
  Best Local Similarity 93.3%; Pred. No. 0.0015;
  Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQRGPGRAFTVIGK 15
    ||||| |||||
Db 1 RIQRGAGRAFTVIGK 15

RESULT 146
AAW66421
ID AAR66421 standard; peptide; 15 AA.
XX
AC AAR66421;
XX
XX 25-MAR-2003 (revised)
DT 03-AUG-1995 (first entry)
XX
XX HIV-1 IIIB peptide 18-6.
XX
XX T cell helper site; cytotoxic T cell response; neutralising antibody;
KW human immunodeficiency virus type 1; envelope glycoprotein gp120;
KW cluster peptide; principal neutralising determinant.
XX
XX Synthetic.
XX
XX WO9426785-A1.
XX
XX 24-NOV-1994.
XX
XX 13-MAY-1994; 94WO-US005142.
XX
XX 14-MAY-1993; 93US-00060988.
XX
XX (USSH ) US SEC DEPT HEALTH.
XX
XX Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;
XX WPI; 1995-006707/01.
XX
XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies
PT responses - to target antigen in hosts of different MHC haplotypes, esp.
PT for therapeutic or prophylactic vaccines against HIV.
XX
XX Example 1; Page 33; 120pp; English.
XX
XX Single residues from the HIV-1 RP sequence (AAR66415) replaced residues
CC in the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue
CC on the binding of neutralising and non-neutralising sera from animals
CC immunised with the cluster peptides PCLUS 3-18 and PCLUS 6-18 (see
CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-
CC R66430) showed that binding was enhanced over peptide 18 control when a
CC tyrosine was substd. for a Val at position 11 and substns. at positions
CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of
CC sera was reduced when substns. were made in the principal neutralising
CC determinant sequence (PGRAP). In peptide 18-6, the Pro residue at
CC position 6 in peptide 18 has been replaced by an Ala residue. (Updated on
CC 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 15 AA;
  Query Match      89.3%; Score 68; DB 2; Length 13;
  Best Local Similarity 100.0%; Pred. No. 0.0018;
  Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 QRGGPGRAFTVIGK 15
    ||||| |||||
Db 1 QRGGPGRAFTVIGK 13

RESULT 147
AAW62890
ID AAW62890 standard; peptide; 13 AA.
XX
AC AAW62890;
XX
XX 30-SEP-1998 (first entry)
DT
XX
XX Peptide sequence of the specification.
XX
XX Monoclonal antibody; HIV-1gp120; gp160; infection; H9 cell;

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AAW22327
ID AAW22327 standard; peptide; 13 AA.
XX
AC AAW22327;
XX
XX 17-OCT-2003 (revised)
DT 18-SEP-1997 (first entry)
XX
XX HIV-1 strain IIIB gp120 V3 loop peptide.
XX
XX Epitope; human immunodeficiency virus type 1; HIV-1; gp120; gp160;
KW monoclonal antibody; V3 loop; immunisation; mouse; splenocyte; hybridoma;
KW membrane fraction; passive immunisation; human.
XX
XX Human immunodeficiency virus 1.
XX
XX US5618922-A.
XX
XX 08-APR-1997.
XX
XX 25-JUL-1994; 94US-00279906.
XX
XX 25-JUL-1994; 94US-00279906.
XX
XX (NISP ) NISSIN SHOKUHIN KAISHA LTD.
XX
XX Yoneda Y, Ohno T, Terada M;
XX WPI; 1997-225475/20.
XX
XX Monoclonal antibody specific for human immunodeficiency virus type 1 MN
PT strain - for passive immunisation against infection.
XX
XX Example 3; Col 10; 14pp; English.
XX
XX The invention relates to a novel monoclonal antibody (Mab) NM03 which
CC binds to epitopes from the human immunodeficiency virus type 1 (HIV-1).
CC The antibody was raised conventionally by immunising Balb/c mice with
CC purified live HIV-1 MN, then isolating splenocytes and fusing them to P3-
CC X63-Ag8-U1 cells. Hybridomas were then screened with membrane fractions
CC from infected and non-infected H9 cells. The Mab was observed to bind to
CC a protein band of 120 kD on a Western blot of separated, denatured HIV-1
CC proteins. This binding was shown to be between residues 320-327 by
CC epitope mapping by ELISA and competitive binding. The ability of the Mab
CC to inhibit infection of cells by HIV-1 shown by infecting H9 cells with
CC live strains of HIV-1 and testing infection by a p24 assay. This peptide
CC sequence represents the V3 loop region from HIV-1 strain IIIB, where the
CC Mab NM03 binds. The Mab can be used for the passive immunisation of
CC humans susceptible to, or infected with HIV-1. (Updated on 17-OCT-2003 to
CC standardise OS field)
XX
SQ Sequence 13 AA;
  Query Match      89.3%; Score 68; DB 2; Length 13;
  Best Local Similarity 100.0%; Pred. No. 0.0018;
  Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 QRGGPGRAFTVIGK 15
    ||||| |||||
Db 1 QRGGPGRAFTVIGK 13

RESULT 147
AAW62890
ID AAW62890 standard; peptide; 13 AA.
XX
AC AAW62890;
XX
XX 30-SEP-1998 (first entry)
DT
XX
XX Peptide sequence of the specification.
XX
XX Monoclonal antibody; HIV-1gp120; gp160; infection; H9 cell;

```

KW HIV strain MN; treatment; human HIV infection.

XX Synthetic.

PN JP10182489-A.

PD 07-JUL-1998.

XX 25-DEC-1996; 96JP-00344904.

PR 25-DEC-1996; 96JP-00344904.

XX (NISP ) NISSIN SHOKUHN KAISHA LTD.

DR WPI; 1998-433774/37.

XX Monoclonal antibody which binds to HIV-1gp120 or gp160 - used to prevent  
PT and treat human HIV infection.

XX Example 3; Page 8; 12pp; Japanese.

CC AAWG2889-900 represent peptides used to identify a peptide sequence  
(AAW62874) present in HIV-1gp120 or gp160 which is bound by the  
CC monoclonal antibody of the invention. The antibody neutralises in vitro  
CC the infection of H9 cell by an active HIV strain MN according to the p24  
CC analytical method. The antibody is used for treatment of human HIV  
CC infection

XX Sequence 13 AA;

Query Match 88.3%; Score 68; DB 2; Length 13;

Best Local Similarity 100.0%; Pred. No. 0.0018;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 QRGPGRAFTVIGK 15

Db 1 QRGPGRAFTVIGK 13

RESULT 148

AAW99433

ID AAW99433 standard; peptide; 13 AA.

XX AAW99433;

DT 11-SEP-2003 (revised)

DT 07-DEC-2001 (first entry)

XX Vaccine related MHC ligand peptide SEQ ID NO:536.

XX Glutamic acid; glutamine; vaccine; major histocompatibility complex; MHC;  
KW immunomodulator; antiallergic; endocrine; neuroprotectant; virucidal;  
KW bactericidal; antiparasitic; fungicidal; cytostatic; medicine;  
KW pharmaceutical; immune disorder; immune deficiency; autoimmune;  
KW hypersensitivity; allergy; graft rejection; infection; hormonal disorder;  
KW central nervous system disease; cancer; melanoma; anti-melanoma vaccine;  
KW human immunodeficiency virus.

XX Human immunodeficiency virus 1.

PN WO200170772-A2.

XX 27-SEP-2001.

XX 22-MAR-2001; 2001WO-FR000872.

XX 23-MAR-2000; 2000FR-00003711.

XX (FABR ) FABRE MEDICAMENT SA PIERRE.

XX Klinguer-Hamour C, Corvaia N, Beck A, Goetsch L;

XX WPI; 2001-611470/70.

XX

PT Stabilized pharmaceutical containing N-terminal glutamic acid or  
PT glutamine, useful e.g. in anti-melanoma vaccines, is an addition salt  
PT with strong acid.

XX Claim 9; Page 122; 149pp; French.

XX The present invention describes a pharmaceutical compound (I) that  
CC contains an N-terminal glutamic acid (Glu) or glutamine (Gln) residue in  
CC the form of an addition salt with a strong, physiologically acceptable  
CC acid (II). Also described are: (a) a pharmaceutical composition  
CC containing at least one (I); (b) a vaccine containing at least one (I)  
CC where this is a major histocompatibility complex (MHC) ligand (Ia); (c) a  
CC method for in vitro diagnosis of diseases associated with the presence of  
CC (Ia); (d) a kit for method (c) that includes a (Ia); and (e) a process  
CC for preparing (I). (I) has immunomodulator, endocrine, antiallergic,  
CC neuroprotectant, virucidal, bactericidal, antiparasitic, fungicidal and  
CC cytostatic activities. (I) are useful, in human or veterinary medicine,  
CC in pharmaceutical compositions (for treating immune disorders, e.g.  
CC immune deficiency, autoimmune states, hypersensitivity, allergy, graft  
CC rejection, infection, hormonal disorders and central nervous system  
CC diseases), also, where (I) is a MHC ligand (Ia), in vaccines for  
CC treatment or prevention of: (i) viral, bacterial, parasitic or fungal  
CC infections; or (ii) of cancers. A particular application is in anti-  
CC melanoma vaccines. (I) are also useful for in vitro diagnosis of diseases  
CC associated with interactions between MHC and (I), e.g. melanoma and human  
CC immunodeficiency virus infection. AAW98898 to AAW99592 represent peptides  
CC which can be used in pharmaceutical compounds from the present invention.  
CC (Updated on 11-SEP-2003 to standardise OS field)

XX Sequence 13 AA;

Query Match 88.3%; Score 68; DB 4; Length 13;

Best Local Similarity 100.0%; Pred. No. 0.0018;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 QRGPGRAFTVIGK 15

Db 1 QRGPGRAFTVIGK 13

RESULT 149

AAW66417

ID AAW66417 standard; peptide; 14 AA.

XX AAW66417;

XX 25-MAR-2003 (revised)

DT 03-AUG-1995 (first entry)

XX HIV-1 IIIB peptide 18-2.

XX T cell helper site; cytotoxic T cell response; neutralising antibody;  
KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
KW cluster peptide; principal neutralising determinant.

XX Synthetic.

XX WO9426785-A1.

XX 24-NOV-1994.

XX 13-MAY-1994; 94WO-US005142.

XX 14-MAY-1993; 93US-00060988.

XX (USSH ) US SEC DEPT HEALTH.

XX Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;

XX WPI; 1995-006707/01.

XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies

PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 XX Example 1; Page 33; 120pp; English.  
 XX Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC on the HIV-1 IIB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCUS 3-18 and PCUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substd. for a Val at position 11 and subetns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PCRAP). In peptide 18-2, the Ile residue at  
 CC position 2 in peptide 18 has been deleted. (Updated on 25-MAR-2003 to  
 CC correct PN field.)  
 XX Sequence 14 AA;  
 SQ  
 Query Match 88.3%; Score 68; DB 2; Length 14;  
 Best Local Similarity 100.0%; Pred. No. 0.0019;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 3 QRGPGRAFVTIGK 15  
 DB 2 QRGPGRAFVTIGK 14  
 RESULT 150  
 AAW76897  
 ID AAW76897 standard; peptide; 15 AA.  
 XX AC AAW76897;  
 XX DT 25-JAN-1999 (first entry)  
 XX DE Fusion immunoglobulin heavy chain HIV gp120 T cell epitope #16.  
 XX B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IGH;  
 KW human immune deficiency virus; HIV; tolerance; treatment; therapy;  
 KW prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;  
 KW microbial infection; autoimmune disease; antibody; apoptosis;  
 KW antiviral T cell immunity.  
 XX Mus sp.  
 OS Homo sapiens.  
 XX WO9836087-A1.  
 XX PD 20-AUG-1998.  
 XX PF 13-FEB-1998; 98WO-US002766.  
 XX PR 13-FEB-1997; 97US-0040581P.  
 XX (AMNA-) AMERICAN NAT RED CROSS.  
 XX Scott D, Zambidis E;  
 XX WPI; 1998-506315/43.  
 XX New fusion immunoglobulin heavy chain including gp120 epitopes and  
 PT related complete antibodies - DNA, vectors and transformed cells, used to  
 PT induce tolerance to the epitopes for treatment of human immune deficiency  
 PT virus infection.  
 XX Claim 11; Page 120; 154pp; English.  
 XX This sequence is an epitope used in the construction of a novel fusion  
 CC immunoglobulin heavy chain (IGH) protein with a mammalian, especially  
 CC human, IGH chain fused in frame at its N-terminus to one or more human  
 CC immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or

CC transfected cells are used to tolerate subjects to gp120 epitopes and to  
 CC maintain this tolerance, particularly for treatment of HIV infection,  
 CC optionally together with other therapeutic/prophylactic agents such as  
 CC vaccines, chemotherapeutic agents and immune response modifiers. Such  
 CC proteins can be used against other diseases where an immune response is  
 CC deleterious, e.g. microbial infection, tumours or autoimmune disease.  
 CC Induction of tolerance suppresses production of antibodies against gp120,  
 CC so prevents or inhibits 'bystander' apoptosis of uninfected T cells that  
 CC are bound to gp120 protein, maximising induction of protective antiviral  
 XX T cell immunity  
 XX Sequence 15 AA;  
 SQ  
 Query Match 88.3%; Score 68; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.0021;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 3 QRGPGRAFVTIGK 15  
 DB 2 QRGPGRAFVTIGK 14  
 RESULT 151  
 AAM99083  
 ID AAM99083 standard; peptide; 15 AA.  
 XX AC AAM99083;  
 XX DT 11-SEP-2003 (revised)  
 XX DT 07-DEC-2001 (first entry)  
 XX DE Vaccine related MHC ligand peptide SEQ ID NO:186.  
 XX Glutamic acid; glutamine; vaccine; major histocompatibility complex; MHC;  
 KW immunomodulator; antiallergic; endocrine; neuroprotectant; virucidal;  
 KW bactericidal; antiparasitic; fungicidal; cytostatic; medicine;  
 KW pharmaceutical; immune disorder; immune deficiency; autoimmune;  
 KW hypersensitivity; allergy; graft rejection; infection; hormonal disorder;  
 KW central nervous system disease; cancer; melanoma; anti-melanoma vaccine;  
 KW human immunodeficiency virus.  
 XX Human immunodeficiency virus 1.  
 OS WO200170772-A2.  
 XX PN 27-SEP-2001.  
 XX PD 22-MAR-2001; 2001WO-FR000872.  
 XX PF 23-MAR-2000; 2000FR-00003711.  
 XX PR (FABR ) FABRE MEDICAMENT SA PIERRE.  
 XX PA Klinguer-Hamour C, Corvaia N, Beck A, Goetsch L;  
 XX WPI; 2001-611470/70.  
 XX Stabilized pharmaceutical containing N-terminal glutamic acid or  
 PT glutamine, useful e.g. in anti-melanoma vaccines, is an addition salt  
 PT with strong acid.  
 XX Claim 9; Page 63; 149pp; French.  
 XX The present invention describes a pharmaceutical compound (I) that  
 CC contains an N-terminal glutamic acid (Glu) or glutamine (Gln) residue in  
 CC the form of an addition salt with a strong, physiologically acceptable  
 CC acid (iii). Also described are: (a) a pharmaceutical composition  
 CC containing at least one (I); (b) a vaccine containing at least one (I)  
 CC where this is a major histocompatibility complex (MHC) ligand (Ia); (c) a  
 CC method for in vitro diagnosis of diseases associated with the presence of  
 CC (Ia); (d) a kit for method (c) that includes a (Ia); and (e) a process  
 CC for preparing (I). (I) has immunomodulator, endocrine, antiallergic,  
 CC neuroprotectant, virucidal, bactericidal, antiparasitic, fungicidal and

CC cytostatic activities. (I) are useful, in human or veterinary medicine,  
 CC in pharmaceutical compositions (for treating immune disorders, e.g.  
 CC immune deficiency, autoimmune states, hypersensitivity, allergy, graft  
 CC rejection, infection, hormonal disorders and central nervous system  
 CC diseases), also, where (I) is a MHC ligand (Ia), in vaccines for  
 CC treatment or prevention of: (i) viral, bacterial, parasitic or fungal  
 CC infections; or (ii) of cancers. A particular application is in anti-  
 CC melanoma vaccines. (I) are also useful for in vitro diagnosis of diseases  
 CC associated with interactions between MHC and (I), e.g. melanoma and human  
 CC immunodeficiency virus infection. AM98898 to AM99592 represent peptides  
 CC which can be used in pharmaceutical compounds from the present invention.  
 CC (Updated on 11-SEP-2003 to standardise OS field)

XX SQ Sequence 15 AA;  
 Query Match 88.3%; Score 68; DB 4; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.0021; Mismatches 0; Indels 0; Gaps 0;  
 Matches 13; Conservative 0;

QY 3 QRGPGRAFTVIGK 15  
 |||||  
 Db 2 QRGPGRAFTVIGK 14

## RESULT 152

AAW63062  
 ID AAW63062 standard; peptide; 18 AA.

AC AAW63062;  
 XX

DT 07-OCT-1998 (first entry)

DE Human immunodeficiency virus type 1 (HIV 1) Env peptide 312-327.

XX Superantigen; treatment; cancer; tumour-specific antigen;  
 KW autoimmune disease related antigen; infection; bacterial; viral;  
 KW eukaryotic; autoimmune disease; inhibit; pathological response;  
 KW immune response.

XX Synthetic.

OS Human immunodeficiency virus 1.

XX WO9826747-A2.

XX 25-JUN-1998.

XX 17-DEC-1997; 97WO-US023637.

PR 17-DEC-1996; 96US-0033172P.

PR 17-APR-1997; 97US-0044074P.

PA (TERM/). TERMAN D S.

XX Terman DS;

XX WPI; 1998-362497/31.

XX Conjugates and polymers containing superantigen and therapeutic antigen -  
 PT for treatment of cancer, infection, autoimmune disease and graft  
 PT rejection, also treatment by administering lymphocytes treated in vitro  
 PT by these antigens.

XX Example 2; Page 40; 139pp; English.

XX Synthetic peptides AAW63049-85 are used, with superantigens, to exemplify  
 CC the invention. The specification describes a method for treatment of  
 CC cancer which comprises incubating lymphocytes with a tumour-specific  
 CC antigen or autoimmune disease related antigen and a superantigen. The  
 CC treated cells are then introduced into the patient. The superantigen and  
 CC the tumour-specific antigen or autoimmune disease related antigen can be  
 CC conjugated together. The products are used to treat cancer (carcinoma,  
 CC melanoma, lymphoma etc.), infections (bacterial, viral or eukaryotic) and  
 CC autoimmune disease (e.g. idiopathic thrombocytopenic purpura, rheumatoid

CC arthritis, systemic lupus erythematosus, multiple sclerosis etc.). The  
 CC antigens either induce an immune response or inhibit a pathological  
 CC response

XX SQ Sequence 18 AA;

Query Match 88.3%; Score 68; DB 2; Length 18;

Best Local Similarity 100.0%; Pred. No. 0.0024;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 QRGPGRAFTVIGK 15

|||||  
 Db 6 QRGPGRAFTVIGK 18

## RESULT 153

AAW79180  
 ID AAW79180 standard; peptide; 21 AA.

XX AAW79180;

XX 25-JAN-1999 (first entry)

DE Fusion immunoglobulin heavy chain HIV gp120 T cell epitope #58.

XX B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IGH;  
 KW human immune deficiency virus; HIV; tolerance; treatment; therapy;  
 KW prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;  
 KW microbial infection; autoimmune disease; antibody; apoptosis;  
 KW antiviral T cell immunity.

XX Mus sp.

OS Homo sapiens.

XX WO9836087-A1.

XX 20-AUG-1998.

XX 13-FEB-1998; 98WO-US002766.

PR 13-FEB-1997; 97US-0040581P.

XX (AMNA-) AMERICAN NAT RED CROSS.

XX Scott D, Zambidis E;

XX WPI; 1998-506315/43.

XX New fusion immunoglobulin heavy chain including gp120 epitopes and  
 PT related complete antibodies - DNA, vectors and transformed cells, used to  
 PT induce tolerance to the epitopes for treatment of human immune deficiency  
 PT virus infection.

XX Disclosure; Page 50; 154pp; English.

XX This sequence is an epitope used in the construction of a novel fusion  
 CC immunoglobulin heavy chain (IgH) protein with a mammalian, especially  
 CC human, IGH chain fused in frame at its N-terminus to one or more human  
 CC immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or  
 CC transfectant cells are used to tolerate subjects to gp120 epitopes and to  
 CC maintain this tolerance, particularly for treatment of HIV infection,  
 CC optionally together with other therapeutic/prophylactic agents such as  
 CC vaccines, chemotherapeutic agents and immune response modifiers. Such  
 CC proteins can be used against other diseases where an immune response is  
 CC deleterious, e.g. microbial infection, tumours or autoimmune disease.  
 CC Induction of tolerance suppresses production of antibodies against gp120,  
 CC so prevents or inhibits 'bystander' apoptosis of uninfected T cells that  
 CC are bound to gp120 protein, maximising induction of protective antiviral  
 CC T cell immunity

XX SQ Sequence 21 AA;

Query Match 88.3%; Score 68; DB 2; Length 21;



```
Best Local Similarity 100.0%; Pred. No. 0.0028;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 QRGPGRAFTVIGK 15
Db 1 QRGPGRAFTVIGK 13

RESULT 154
AAW76901
ID AAW76901 standard; peptide; 21 AA.
AC AAW76901;
XX
XX
XX 25-JAN-1999 (first entry)
XX
XX Fusion immunoglobulin heavy chain HIV gp120 T cell epitope #20.
XX
XX B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IGH;
XX human immune deficiency virus; HIV; tolerance; treatment; therapy;
XX prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;
XX microbial infection; autoimmune disease; antibody; apoptosis;
XX antiviral T cell immunity.
XX
XX Mus sp.
XX OS Homo sapiens.
XX
XX WO9836087-A1.
XX
XX 20-AUG-1998.
XX
XX 13-FEB-1998; 98WO-US002766.
XX
XX 13-FEB-1997; 97US-0040581P.
XX
XX (AMNA-) AMERICAN NAT RED CROSS.
XX
XX Scott D, Zambidis E;
XX
XX WPI; 1998-506315/43.
XX
XX New fusion immunoglobulin heavy chain including gp120 epitopes and
XX related complete antibodies - DNA, vectors and transformed cells, used to
XX induce tolerance to the epitopes for treatment of human immune deficiency
XX virus infection.
XX
XX Claim 11; Page 120; 154pp; English.
XX
XX This sequence is an epitope used in the construction of a novel fusion
XX immunoglobulin heavy chain (IGH) protein with a mammalian, especially
XX human, IGH chain fused in frame at its N-terminus to one or more human
XX immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or
XX transfected cells are used to tolerate subjects to gp120 epitopes and to
XX maintain this tolerance, particularly for treatment of HIV infection,
XX optionally together with other therapeutic/prophylactic agents such as
XX vaccines, chemotherapeutic agents and immune response modifiers. Such
XX proteins can be used against other diseases where an immune response is
XX deleterious, e.g. microbial infection, tumours or autoimmune disease.
XX Induction of tolerance suppresses production of antibodies against gp120,
XX so prevents or inhibits bystander apoptosis of uninfected T cells that
XX are bound to gp120 protein, maximising induction of protective antiviral
XX T cell immunity
XX
XX Sequence 21 AA;

Query Match 88.3%; Score 68; DB 2; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.0028;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 QRGPGRAFTVIGK 15
Db 1 QRGPGRAFTVIGK 13

RESULT 155
AAW74608
ID AAR74608 standard; peptide; 24 AA.
XX
XX
XX AAR74608;
XX
XX 16-OCT-2003 (revised)
XX 04-JAN-1996 (first entry)
XX
XX HIV-1 gp120 peptide #5.
XX
XX HIV-1; HIV; AIDS; gp120; mucosal cell; epithelium; vagina; rectum;
XX antibody; mucosal administration; vaccine; infection.
XX
XX Human immunodeficiency virus 1.
XX
XX WO9511701-A1.
XX
XX 04-MAY-1995.
XX
XX 25-OCT-1994; 94WO-US012152.
XX
XX 26-OCT-1993; 93US-00143577.
XX
XX (SYNT-) SYNTELLO INC.
XX
XX Czerkinsky C, Holmgren J, Horal P, Svennerholm B, Vahlne A;
XX
XX WPI; 1995-178653/23.
XX
XX HIV-1 gp120 peptide to inhibit mucosal epithelium cell infection - useful
XX in peptide vaccine to inhibit HIV-1 infection of vaginal or rectal
XX mucosa.
XX
XX Claim 2; Page 23; 34pp; English.
XX
XX The peptide represented in this sequence, and those represented by
XX sequences AAR74604-7 are epitopes of HIV-1 gp120 that are effective to
XX generate antibodies that inhibit infection of mucosal cells by HIV-1.
XX These peptides are administered to the epithelium in a vaccine, or are
XX used to generate mucosal antibodies and thereby inhibit infection by HIV-
XX 1. These peptides are used for inhibiting the entry of HIV into vaginal
XX and rectal mucosal epithelium. The antibodies that can be generated from
XX them are able to block subsequent infection by HIV. (Updated on 16-OCT-
XX 2003 to standardise OS field)
XX
XX Sequence 24 AA;

Query Match 88.3%; Score 68; DB 2; Length 24;
Best Local Similarity 93.3%; Pred. No. 0.0031;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RIQRGGRFAFTVIGK 15
Db 2 RIQRGGRFAFTVIGK 16

RESULT 156
AAR04475
ID AAR04475 standard; protein; 25 AA.
XX
XX AAR04475;
XX
XX 09-SEP-2004 (revised)
XX 25-MAR-2003 (revised)
XX 20-SEP-1990 (first entry)
XX
XX Human immunodeficiency virus hybrid peptide RPI37.
XX
XX HIV isolates HIV-IIIB and HIV-RF; hybrid peptide RPI37; therapy; AIDS;
XX principal neutralising domain; antibodies; diagnosis; prophylaxis.
XX
```

OS Synthetic.  
 PN WO9003984-A.  
 XX  
 PD 19-APR-1990.  
 XX  
 PF 03-OCT-1988; 88US-00252949.  
 XX  
 PR 03-OCT-1988; 88US-00252949.  
 PR 01-JUN-1989; 89US-00359543.  
 PR 19-SEP-1989; 89US-00407663.  
 XX  
 PA (REPK ) REPLIGEN CORP.  
 XX  
 PI Rusche JR, Putney SD, Javaherian K, Farley J, Grimailla R;  
 PI Lynn DU, Petrobre J;  
 XX  
 DR WPI; 1990-147824/19.  
 XX  
 XX Principal neutralising domain of HIV variants - used for producing  
 PT peptide(s) and antibodies for diagnosis, prophylaxis and/or therapy  
 PT therapy of HIV infection.  
 XX  
 PS Claim 8 (58); Page 76; 108pp; English.  
 XX  
 CC Peptide RP137 comprises segments of the Principal Neutralising Domain  
 CC (envelope protein) from isolates HIV-RF and HIV-IIIB. The last Cys  
 CC residue is added for the purpose of crosslinking to carrier proteins.  
 CC Cysteine residues may be added, so that the residues at or near both ends  
 CC form a disulfide bond, giving peptide a loop-like configuration, which  
 CC can be utilised to enhance immunogenic properties of the peptides.  
 CC Protein is capable of eliciting, and/or binding with, neutralising  
 CC antibodies. The neutralising domain is bounded by cysteine residues which  
 CC occur at positions 296 and 331. The peptides can be used as immunogens  
 CC or screening reagents to generate or identify poly- or monoclonal  
 CC antibodies. See also AAR04427-R04506 and AAR04273-Q04279. (Updated on 25-  
 CC MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PA  
 CC field.) (Updated on 25-MAR-2003 to correct PI field.)  
 CC  
 CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key  
 XX  
 SQ Sequence 25 AA;  
 Query Match 88.3%; Score 68; DB 2; Length 25;  
 Best Local Similarity 86.7%; Pred. No. 0.0032;  
 Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 RIQGGGFAFTVIGK 15  
 |||:|||||  
 Db 8 RITKGFGFAFTVIGK 22  
 RESULT 157  
 AAW32887  
 ID AAW32887 standard; peptide; 15 AA.  
 AC  
 XX AAW32887;  
 XX  
 DT 16-JAN-1998 (first entry)  
 XX  
 DE HIV envelope glycoprotein 120 T cell epitope p10.  
 XX  
 KW Hydrophilic; antigenic determinant; HIV; envelope; glycoprotein; env; gp;  
 KW recognition; B lymphocyte; type specific; antibody; vaccine; protection;  
 KW immune response; infection; neutralisation; epitope.  
 XX  
 OS Human immunodeficiency virus.  
 XX  
 PN WO9714436-A1.  
 XX  
 PD 24-APR-1997.  
 XX  
 PF 18-OCT-1996; 96WO-US016911.

XX 20-OCT-1995; 95US-00546515.  
 PR 09-FEB-1996; 96US-00599266.  
 XX  
 PA (UYDU-) UNIV DUKE.  
 XX  
 PI Haynes BF, Falker TJ;  
 XX  
 DR WPI; 1997-244862/22.  
 XX  
 PT Synthetic human immunodeficiency virus vaccine - comprising hydrophilic  
 PT peptide corresponding to at least 1 antigenic determinant of envelope  
 PT glyco:protein recognised by B lymphocytes.  
 XX  
 PS Disclosure; Page 27; 104pp; English.  
 XX  
 CC An essentially pure hydrophilic peptide, comprising at least 1 antigenic  
 CC determinant of human immunodeficiency virus (HIV) envelope (env)  
 CC glycoprotein (gp) recognised by B lymphocytes, when covalently linked to  
 CC a carrier molecule, i.e. the present sequence, induces the production of  
 CC high titres of protective, type specific anti-HIV antibodies (Ab) in a  
 CC mammal. The peptide can be used in vaccines for producing a protective  
 CC immune response to HIV infection, while a HIV neutralising Ab can be  
 CC induced in a primate by administering a composition comprising HIV env  
 CC peptides that disrupt gp120/gp41 interactions  
 XX  
 SQ Sequence 15 AA;  
 Query Match 87.0%; Score 67; DB 2; Length 15;  
 Best Local Similarity 93.3%; Pred. No. 0.0029;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 RIQGGGFAFTVIGK 15  
 |||:|||||  
 Db 1 RIQGGGFAFTVIGK 15  
 RESULT 158  
 AAP95356  
 ID AAP95356 standard; peptide; 17 AA.  
 AC  
 XX AAP95356;  
 XX  
 DT 27-AUG-2003 (revised)  
 DT 30-MAR-1992 (first entry)  
 XX  
 DE Variable region V3, found in the envelope protein gp120 of an AIDS or ARC  
 DE causing or related virus.  
 XX  
 KW Vaccine; AIDS; ARC; HIV; diagnosis.  
 XX  
 OS HTLV-IIIB.  
 XX  
 PN EP311219-A.  
 XX  
 PD 12-APR-1989.  
 XX  
 PF 07-OCT-1988; 88EP-00202248.  
 XX  
 PR 09-OCT-1987; 87NL-00002403.  
 XX  
 PA (DIER-) STICHTING CENT DIER.  
 PA (UNAM ) UNIV VAN AMSTERDAM.  
 PA (UYAM-) UNIV AMSTERDAM ZIEKENHUI.  
 XX  
 PI Goudsmit J, Melen RH;  
 XX  
 DR WPI; 1989-108193/15.  
 XX  
 PT Oligopeptide(s) corresp. to beta-turn variable region of gp.120 - used  
 PT for diagnosis of and prodn of vaccines against AIDS and ARC.  
 XX  
 PS Disclosure; Page 3; 7pp; English.

XX The peptides of the invention comprise the beta-turn AA SQ GPG or GPGR at  
CC positions 312-314 or 312-315 in the AA numbering of HTLV-IIIB (BH10) and  
CC flanking AA SQs having a length equal to or greater than 1 and pref.  
CC equal to or greater than 2 AAs; variants in which the GPG or GPGR SQ has  
CC been replaced by a different beta-turn SQ; and variants in which the free  
CC NH2-terminal gp AA and/or the free carboxyl terminal gp. AA has been  
CC blocked or modified otherwise. (Updated on 27-AUG-2003 to correct OS  
CC field.)  
XX  
XX SQ Sequence 17 AA;

Query Match 87.0%; Score 67; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 0.0033;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 IQRGPGRAFTVIG 14  
| | | | | | | | | | | | | | |  
Db 5 IQRGPGRAFTVIG 17

RESULT 159  
AAR68680  
ID AAR68680 standard; peptide; 20 AA.  
XX  
AC AAR68680;  
XX  
XX 16-OCT-2003 (revised)  
DT 25-MAR-2003 (revised)  
DT 07-SEP-1995 (first entry)  
XX  
XX B cell epitope, LAI.  
XX  
XX T-cell; epitope; HIV-1; core protein; p24E; B-cell; antigen; gp160; gag;  
KW pol; vaccine; multimeric peptide; AIDS; 3D organisation.  
XX  
XX Human immunodeficiency virus 1.  
XX  
XX WO9429339-A1.  
XX  
XX 22-DEC-1994.  
PD  
XX  
XX 08-JUN-1994; 94WO-CA000317.  
PF  
XX  
XX 09-JUN-1993; 93US-00073378.  
PR  
XX  
XX (CONN-) CONNAUGHT LAB LTD.  
PA  
XX  
XX Sia CDY, Chong P, Klein MH;  
PI  
XX  
XX WPI; 1995-036400/05.  
DR  
XX  
XX Novel tandem synthetic HIV-1 peptide(s) - comprising T-cell epitope of  
PT gag protein linked to B-cell epitope of V3 loop protein of an HIV-1  
PT isolate.  
XX  
XX  
XX Disclosure; Page 16; 69pp; English.

XX This sequence represents a B-cell epitope sequence derived from the V3  
CC loop of the HIV-1 isolate, LAI. This B-cell epitope may be linked to a T-  
CC cell epitope also derived from HIV-1. These chimeric peptides may then be  
CC used in the production of HIV-1 vaccines. These peptide sequences may  
CC also be used in the production of multimeric peptides in which the  
CC peptides are C-terminally modified by the addition of a lys residue which  
CC is modified on its epsilon amino acid to carry an additional copy of the  
CC peptide molecule. The linear and multimeric peptides may be used for the  
CC treatment of AIDS by acting to displace the binding of HIV virus to human  
CC or animal cells or by disturbing the 3D organisation of the virus.  
CC (Updated on 25-MAR-2003 to correct PN field.) (Updated on 16-OCT-2003 to  
CC standardise OS field)  
XX  
XX Sequence 20 AA;

Query Match 87.0%; Score 67; DB 2; Length 20;  
Best Local Similarity 92.9%; Pred. No. 0.0038;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIG 14  
| | | | | | | | | | | | | | |  
Db 7 RIQRGPGRAFTVIG 20

RESULT 161  
AAW25850  
ID AAW25850 standard; peptide; 20 AA.  
XX  
XX AAW25850;  
XX

Query Match 87.0%; Score 67; DB 2; Length 20;  
Best Local Similarity 92.9%; Pred. No. 0.0038;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIG 14  
| | | | | | | | | | | | | | |  
Db 7 RIQRGPGRAFTVIG 20

RESULT 161  
AAW25850  
ID AAW25850 standard; peptide; 20 AA.  
XX  
XX AAW25850;  
XX

Query Match 87.0%; Score 67; DB 2; Length 20;  
Best Local Similarity 92.9%; Pred. No. 0.0038;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTVIG 14  
| | | | | | | | | | | | | | |  
Db 7 RIQRGPGRAFTVIG 20

RESULT 160  
AAW25898  
ID AAW25898 standard; peptide; 20 AA.  
XX  
AC AAW25898;  
XX  
XX 25-MAR-2003 (revised)  
DT 22-OCT-1997 (first entry)  
XX  
XX HIV-1 strain IIIB env protein V3 loop B-cell epitope.  
XX  
XX HIV; human immunodeficiency virus; gag; T-cell; B-cell; epitope; env;  
KW V3 loop; vaccine; determinant; chimaeric.  
XX  
XX Synthetic.  
OS  
XX  
XX US5639854-A.  
PN  
XX  
XX 17-JUN-1997.  
PD  
XX  
XX 09-JUN-1994; 94US-00257528.  
PF  
XX  
XX 09-JUN-1993; 93US-00073378.  
PR  
XX  
XX (CONN-) CONNAUGHT LAB LTD.  
PA  
XX  
XX Klein MH, Sia CDY, Chong P;  
PI  
XX  
XX WPI; 1997-332082/30.  
DR  
XX  
XX Tandem synthetic HIV peptide(s) useful as immunogens - comprising gag  
PT protein T-cell epitope linked to env protein B-cell epitope.  
XX  
XX  
XX Claim 8; Col 74; 41pp; English.

XX The invention relates to new synthetic peptides comprising at least one  
CC amino acid sequence comprising an HIV gag protein T-cell epitope linked  
CC at its C- or N-terminus to an amino acid sequence comprising a B-cell  
CC epitope of the V3 loop of an HIV env protein, which can be used to  
CC generate vaccines against HIV-1. The T-cell epitope sequence is pref.  
CC selected from the T-helper determinant core peptides P24E, P24N, P24L,  
CC P24M and P24H while the B-cell epitopes are derived from HIV strains  
CC including CTLB-56, V3MN, CTLB-29, CTLB-55, SF2, LAI, IIIB, RF, Z6, 2054,  
CC 1714 and BX08. The peptides are chimaeric and can be linked to a branched  
CC Lys backbone. This sequence represents the HIV-1 strain IIIB env protein  
CC V3 loop B-cell epitope. (Updated on 25-MAR-2003 to correct PF field.)  
XX  
XX SQ Sequence 20 AA;

DT 25-MAR-2003 (revised)  
 DT 20-OCT-1997 (first entry)  
 XX HIV-1 strain LAI env protein V3 loop B-cell epitope.  
 DE HIV; human immunodeficiency virus; gag; T-cell; B-cell; epitope; env;  
 KW V3 loop; vaccine; determinant; chimeric.  
 XX Synthetic.  
 OS US5639854-A.  
 PN 17-JUN-1997.  
 PD 09-JUN-1994; 94US-00257528.  
 PF 09-JUN-1993; 93US-00073378.  
 PR (CONN-) CONNAUGHT LAB LTD.  
 XX Klein MH, Sia CDY, Chong P;  
 PI WPI; 1997-332082/30.  
 DR Tandem synthetic HIV peptide(s) useful as immunogens - comprising gag  
 PT protein T-cell epitope linked to env protein B-cell epitope.  
 XX Claim 8; Col 74; 41pp; English.  
 PS The invention relates to new synthetic peptides comprising at least one  
 CC amino acid sequence comprising an HIV gag protein T-cell epitope linked  
 CC at its C- or N-terminus to an amino acid sequence comprising a B-cell  
 CC epitope of the V3 loop of an HIV env protein, which can be used to  
 CC generate vaccines against HIV-1. The T-cell epitope sequence is pref.  
 CC selected from the T-helper determinant core peptides P24E, P24N, P24L,  
 CC P24M and P24H while the B-cell epitopes are derived from HIV strains  
 CC including CTLB-56, V3MN, CTLB-29, CTLB-55, SF2, LAI, IIB, RF, Z6, 2054,  
 CC 1714 and BX08. The peptides are chimeric and can be linked to a branched  
 CC lys backbone. This sequence represents the HIV-1 strain LAI env protein  
 CC V3 loop B-cell epitope. (Updated on 25-MAR-2003 to correct PF field.)  
 XX Sequence 20 AA;  
 SQ  
 Query Match 87.0%; Score 67; DB 2; Length 20;  
 Best Local Similarity 92.9%; Pred. No. 0.0038;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 RIQGPGRFVTIG 14  
 DB 7 RIQGPGRFVTIG 20  
 RESULT 162  
 AAW67366  
 ID AAW67366 standard; peptide; 20 AA.  
 XX AAW67366;  
 AC AAW67366;  
 XX 17-OCT-2003 (revised)  
 DT 25-JAN-1999 (first entry)  
 DE HIV-1 strain LAI V3 loop peptide epitope.  
 XX Immunogen; vaccine; HIV-1; T-cell; B-cell; epitope; core protein; gp120;  
 KW V3 loop.  
 XX Human immunodeficiency virus 1.  
 OS US5817754-A.  
 PN 06-OCT-1998.  
 PD 05-JUN-1995; 95US-00464329.  
 PF

XX 09-JUN-1993; 93US-00073378.  
 PR 09-JUN-1994; 94US-00257528.  
 XX (CONN-) CONNAUGHT LAB LTD.  
 PA Chong P, Klein MH, Sia CDY;  
 PI WPI; 1998-556461/47.  
 DR Synthetic human immunodeficiency virus-1 peptide(s) - containing T-cell  
 XX epitope and B-cell epitope(s) are candidate vaccines against HIV-1.  
 PT Disclosure; Col 9; 40pp; English.  
 PS The invention relates to a novel immunogenic composition for use in  
 CC vaccines for the treatment of HIV-1 comprising an HIV-1-derived T-cell  
 CC epitope linked to an HIV-1-derived B-cell epitope. The T-cell epitopes  
 CC are generally designed based on the p24 core protein and the B-cell  
 CC epitopes from the V3 loop of the gp120 protein from various HIV-1  
 CC strains. This peptide corresponds to the V3 loop peptide epitope from the  
 CC HIV-1 strain LAI. The peptide is used to generate a hybrid T- and B-cell  
 CC epitope (AAW67353). (Updated on 17-OCT-2003 to standardise OS field)  
 XX Sequence 20 AA;  
 SQ  
 Query Match 87.0%; Score 67; DB 2; Length 20;  
 Best Local Similarity 92.9%; Pred. No. 0.0038;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 RIQGPGRFVTIG 14  
 DB 7 RIQGPGRFVTIG 20  
 RESULT 163  
 AAW99974  
 ID AAW99974 standard; peptide; 20 AA.  
 XX AAW99974;  
 AC AAW99974;  
 XX 05-MAY-1999 (first entry)  
 DT HIV-1 vaccine synthetic peptide SEQ ID NO:51.  
 DE HIV-1; human immunodeficiency virus; vaccine; T-cell epitope;  
 KW gag protein; B-cell epitope; gp41 protein; chimeric; infection.  
 XX Synthetic.  
 OS Human immunodeficiency virus 1.  
 OS US5876731-A.  
 PN 02-MAR-1999.  
 PD 05-JUN-1995; 95US-00462507.  
 PF 09-JUN-1993; 93US-00073378.  
 PR 09-JUN-1994; 94US-00257528.  
 XX (CONN-) CONNAUGHT LAB LTD.  
 PA Chong P, Klein MH, Sia CDY;  
 PI WPI; 1999-189590/16.  
 DR Synthetic chimeric HIV polypeptides - comprising gag protein T-cell  
 PT epitope linked to gp41 B-cell epitope.  
 XX Example 1; Col 49-50; 41pp; English.  
 PS The present invention describes a synthetic peptide comprising an amino  
 CC acid sequence containing a T-cell epitope of an HIV gag protein linked at

CC its C terminus to an amino acid sequence containing a B-cell epitope of  
 CC an HIV gp1 protein and containing the amino acid sequence: X1LKDWX2;  
 CC where X1 = E, A, G or Q, and X2 = A or T, or an amino acid sequence  
 CC capable of eliciting an HIV-specific antiserum and recognizing the  
 CC sequence X1LKDWX2. The synthetic peptide is useful in vaccines against  
 CC HIV infection and in diagnostic applications. AA98892 to AA98906, and  
 CC AA98989 to AA98999 represent synthetic peptides from the present  
 CC invention  
 CC  
 XX  
 SQ Sequence 20 AA;

Query Match 87.0%; Score 67; DB 2; Length 20;  
 Best Local Similarity 92.9%; Pred. No. 0.0038;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 1 RIQPGGPGRAFTVIG 14  
 |||||  
 Db 7 RIQPGGPGRAFTVIG 20  
 |||||

RESULT 164  
 AAY39699  
 ID AAY39699 standard; peptide; 20 AA.  
 AC AAY39699;

XX, 17-OCT-2003 (revised)  
 DT 26-NOV-1999 (first entry)  
 XX HIV1 chimeric peptide LAI.  
 DE  
 KW HIV; vaccine; immunogenic composition; T cell epitope; B cell epitope;  
 KW infection; antibody; antiviral.  
 KW Human immunodeficiency virus 1.  
 OS  
 XX US951986-A.  
 FN  
 XX 14-SEP-1999.  
 PD  
 XX 06-JUN-1995; 95US-00467881.  
 PF  
 XX 09-JUN-1993; 93US-00073378.  
 PR  
 XX 09-JUN-1994; 94US-00257528.  
 PR  
 XX (CONN-) CONNAUGHT LAB LTD.  
 PA  
 XX Klein MH, Chong P, Sia CDY;  
 PI  
 XX WPI; 1999-550482/46.

Immunogenic composition containing synthetic fusion polypeptides  
 containing both the T and B cell epitopes of the human immunodeficiency  
 virus, useful antigens in producing vaccines.

Discloure; Col 9; 43pp; English.

This sequence represents a fragment of a HIV1 protein, and can be used in  
 the immunogenic composition of the invention. The composition comprises a  
 synthetic fusion polypeptide which includes a sequence encoding 1 or more  
 T cell epitopes and a sequence encoding 1 or more B cell epitopes and a  
 carrier. Both the T cell and B cell epitopes are derived from HIV  
 proteins. The compositions are useful as vaccines against HIV infection.  
 The composition induces HIV-1-specific polyclonal antibodies that are  
 opsonising and antiviral. The peptide components may be selected to  
 induce a response against different viral isolates and in subjects who  
 recognise different T cell epitopes. (Updated on 17-OCT-2003 to  
 standardise OS field)

Query Match 87.0%; Score 67; DB 2; Length 20;  
 Best Local Similarity 92.9%; Pred. No. 0.0038;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Oy 1 RIQPGGPGRAFTVIG 14  
 |||||  
 Db 7 RIQPGGPGRAFTVIG 20  
 |||||

RESULT 165  
 AAY96191  
 ID AAY96191 standard; peptide; 18 AA.  
 AC AAY96191;

DT 19-DEC-2000 (first entry)

DE Glycoprotein gp120 glycosylated peptide.

XX gp120; MUC1; immunomodulator; glycopeptide; T-lymphocyte; T-cell;  
 KW proliferation; cancer; sarcoma; carcinoma; leukaemia; diagnosis; therapy;  
 KW vaccine; adjuvant; glycosylation.  
 XX Unidentified.

XX Key Location/Qualifiers  
 FH Modified-site 15  
 FT /note= "O-glycosylated by GalNAc-beta-1-3Gal"  
 FT  
 XX WO200052046-A1.  
 PN  
 XX 08-SEP-2000.  
 PD  
 XX 01-MAR-2000; 2000MO-GB000724.  
 PF  
 XX 01-MAR-1999; 99GB-00004695.  
 PR  
 XX (IMCR ) IMPERIAL CANCER RES TECHNOLOGY LTD.  
 PA  
 XX Burchell J, Taylor-Papadimitriou J;  
 PI  
 XX WPI; 2000-601868/57.

New immunomodulating glycopeptide that causes super-proliferation of T  
 cells, useful for treating cells in vitro, for diagnosing or treating  
 cancer (e.g. carcinoma or sarcoma) or as an adjuvant.

Discloure; Page 24; 35pp; English.

The present sequence comprises a glycosylated fragment of gp120.  
 Glycopeptides comprising a fragment of the MUC1 repeat sequence,  
 especially having a Gal-GalNAc or GalNAc moiety on Thr-10 or Thr-17 (see  
 AAY96172-74), are useful as immunomodulators, causing super-proliferation  
 of T cells. Such glycopeptides can be used in the treatment or diagnosis  
 of a disease, in particular cancer, or as vaccine adjuvants. The  
 glycopeptides are particularly useful in manufacturing a medicament for  
 preventing or treating cancer by stimulating T cells whose receptors  
 recognize the glycopeptide. They are also useful for diagnosing or  
 treating cancer, e.g. carcinoma (e.g. mammary, lung, bladder or colon  
 carcinomas, or ovary and endometrial tumours), or sarcoma (e.g. soft  
 tissue and bone sarcomas, or leukaemia). Human peripheral blood  
 lymphocytes were used in a proliferation assay. The proliferation index  
 of the gp120 glycopeptide (taking the index as 1 when no glycopeptide was  
 present) was 1-1.7

SQ Sequence 18 AA;

Query Match 85.4%; Score 66.5; DB 3; Length 18;  
 Best Local Similarity 93.8%; Pred. No. 0.0041;  
 Matches 15; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

Oy 1 RIQ-RGPGRAFTVIGK 15  
 |||||  
 Db 3 RIQ-RGPGRAFTVIGK 18  
 |||||

RESULT 166  
 AAW76863  
 ID AAW76863 standard; peptide; 14 AA.  
 XX  
 AC AAW76863;  
 XX  
 DT 25-JAN-1999 (first entry)  
 XX  
 DE Fusion immunoglobulin heavy chain HIV gp120 B cell epitope #33.  
 KW B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IGH;  
 KW human immune deficiency virus; HIV; tolerance; treatment; therapy;  
 KW prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;  
 KW microbial infection; autoimmune disease; antibody; apoptosis;  
 KW antiviral T cell immunity.  
 XX  
 OS Mus sp.  
 OS Homo sapiens.  
 XX  
 PN WO9836087-A1.  
 XX  
 PD 20-AUG-1998.  
 XX  
 PF 13-FEB-1998; 98WO-US002766.  
 XX  
 PR 13-FEB-1997; 97US-0040581P.  
 XX  
 PA (AMNA-) AMERICAN NAT RED CROSS.  
 XX  
 PI Scott D, Zambidis E;  
 XX  
 DR WPI; 1998-506315/43.  
 XX  
 PT New fusion immunoglobulin heavy chain including gp120 epitopes and  
 PT related complete antibodies - DNA, vectors and transformed cells, used to  
 PT induce tolerance to the epitopes for treatment of human immune deficiency  
 PT virus infection.  
 XX  
 PS Claim 10; Page 119; 154pp; English.  
 XX  
 CC This sequence is an epitope used in the construction of a novel fusion  
 CC immunoglobulin heavy chain (IGH) protein with a mammalian, especially  
 CC human, IGH chain fused in frame at its N-terminus to one or more human  
 CC immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or  
 CC transduced cells are used to tolerate subjects to gp120 epitopes and to  
 CC maintain this tolerance, particularly for treatment of HIV infection.  
 CC optionally together with other therapeutic/prophylactic agents such as  
 CC vaccines, chemotherapeutic agents and immune response modifiers. Such  
 CC proteins can be used against other diseases where an immune response is  
 CC deleterious, e.g. microbial infection, tumours or autoimmune disease.  
 CC induction of tolerance suppresses production of antibodies against gp120,  
 CC so prevents or inhibits 'bystander' apoptosis of uninfected T cells that  
 CC are bound to gp120 protein, maximising induction of protective antiviral  
 CC T cell immunity  
 XX  
 SQ Sequence 14 AA;  
 Query Match 85.7%; Score 66; DB 2; Length 14;  
 Best Local Similarity 100.0%; Pred. No. 0.0039;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQGRGPGRAFTVI 13  
 |||||  
 Db 2 RIQGRGPGRAFTVI 14  
 RESULT 167  
 AAW36156  
 ID AAW36156 standard; peptide; 15 AA.  
 XX  
 AC AAW36156;  
 XX

DT 17-OCT-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 30-MAR-1998 (first entry)  
 XX  
 DE HIV-1 strain IIIB gp120 variable region 3 epitope.  
 XX  
 KW Mutant; P64k; fusion protein; stabilisation peptide; purification;  
 KW immunoaffinity chromatography; epitope; vaccine; human; animal; HIV-1.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN WO9726359-A1.  
 XX  
 PD 24-JUL-1997.  
 XX  
 PF 17-JAN-1997; 97WO-CU000001.  
 XX  
 PR 17-JAN-1996; 96CU-00000010.  
 XX  
 PA (INGG-) CBNT ING GENETICA & BIOTECNOLOGIA.  
 XX  
 PI Duarte Cano CA, Guillen Nieto GE, Alvarez Acosta A;  
 PI Carpio Munoz EL, Quintana Vazquez D, Gomez Rodriguez CE;  
 PI Silva Rodriguez RDLC, Nazabal Galvez C, Leal Angulo MDJ;  
 PI Martin Dunn AM;  
 XX  
 DR WPI; 1997-402193/37.  
 XX  
 XX Fusion protein for use as immunogen in vaccines - contains stabilising  
 PT peptide derived from N-terminal 47 amino acids of *Neisseria meningitidis*  
 PT P64k antigen.  
 XX  
 PS Example 4; Page 12; 49pp; Spanish.  
 XX  
 CC This sequence represents an epitope corresponding to the central region  
 CC of the variable region from the gp120 protein of the human  
 CC immunodeficiency virus type 1 (HIV-1) strain IIIB. The peptides AAW36151-  
 CC W36156 were used to generate the multiple epitope-containing polypeptides  
 CC TAB4, TAB9 and TAB13 (AAW36159-T36161). The peptides are especially fused  
 CC to a mutant version of the first 47 amino acids of the P64k protein of  
 CC *Neisseria meningitidis* B:4:PI.15 (AAW36149). The *Neisseria* peptide is  
 CC used as a stabilisation peptide for purification of the heterologous  
 CC protein, especially by immunoaffinity chromatography, when the fusion  
 CC protein is produced in *E. coli*. (Updated on 25-MAR-2003 to correct PI  
 CC field.) (Updated on 17-OCT-2003 to standardise OS field)  
 XX  
 SQ Sequence 15 AA;  
 Query Match 85.7%; Score 66; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.0041;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQGRGPGRAFTVI 13  
 |||||  
 Db 3 RIQGRGPGRAFTVI 15  
 RESULT 168  
 AAW49356  
 ID AAW49356 standard; peptide; 15 AA.  
 XX  
 AC AAW49356;  
 XX  
 DT 02-SEP-2002 (first entry)  
 XX  
 DE HIV-1 isolate IIIB gp120 V3 loop epitope peptide.  
 XX  
 KW Antigen; immunogen; dendrimer; carrier protein; conjugate; vaccine;  
 KW antigenic structure; cross-reactivity; infection; autoimmune disease;  
 KW cancer; immunomodulator; cytostatic; HIV-1; gp120; V3 loop; isolate IIIB.  
 XX  
 OS Synthetic.  
 XX

```

PN WO200236160-A2.
XX
PD 10-MAY-2002.
XX
PF 01-NOV-2001; 2001WO-CU0000007.
XX
XX 03-NOV-2000; 2000CU-00000242.
XX
XX (INGG-) CENT ING GENETICA & BIOTECNOLOGIA.
XX
PI Cruz Ricondo LJ, Aguilar Rubio JC, Iglesias Perez B;
PI Reyes Acosta O, Garay Perez HE, Muzio Gonzalez VL, Guillen Nieto GE;
PI Duarte Cano C, Panton Arias E;
XX
DR WPI; 2002-444347/47.
XX
XX Preparation of antigenic structures having enhanced cross-reactivity and
PT immunogenicity, useful for diagnosis or in vaccines, e.g. against cancer,
PT comprising dendrimeric antigenic epitope conjugated with carrier
PT molecule.
XX
PS Example 10; Fig 1c; 41pp; Spanish.
XX
CC The invention relates to the preparation of antigenic structures with a
CC high cross-reactivity which synergistically enhance immune responses to
CC systemically and/or mucosally administered peptide antigens. Dendrimeric
CC structures containing a desired epitope are synthesised and coupled to a
CC carrier molecule, and are then mixed with a CD4 fusion domain peptide (or
CC a conjugate containing it) and an adjuvant such as alumina. The antigenic
CC structures are used in prophylactic or therapeutic vaccine formulations
CC for the prevention or treatment of infections, autoimmune diseases or
CC cancer in humans and other animals, and may also be used as part of
CC diagnostic systems. The antigenic structures of the invention have
CC synergistically enhanced cross-reactivity and immunogenicity compared
CC with the parent dendrimeric epitope structures from which they are
CC obtained. Sequences AAM49354-AAM49359 represent gp120 V3 loop epitopes
CC from different HIV-1 isolates. These were used in an exemplification to
CC demonstrate that the potentiation of immunogenicity and cross-reactivity
CC associated with the structures of the invention is independent of the
CC sequence of the V3 loop peptide used in the antigenic structure. The
CC present sequence represents the gp120 V3 loop epitope from HIV-1 isolate
CC I11B
XX
SQ Sequence 15 AA;

Query Match 85.7%; Score 66; DB 5; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.0041;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQGGGGRFVITI 13
   |||||
Db 3 RIQGGGGRFVITI 15
   |||||

RESULT 169
ABR39121
ID ABR39121 standard; peptide; 15 AA.
XX
XX ABR39121;
AC
XX
XX 23-OCT-2003 (revised)
DT 10-MAY-2003 (first entry)
XX
XX HIV-1 gp120 peptide SEQ ID NO 21.
DE
XX ADP-ribosylating exotoxin; immune response; immunisation; vaccine;
KW adjuvant; HIV; gp120.
XX
XX Human immunodeficiency virus 1.
OS
XX WO2003004055-A2.
PN
XX 16-JAN-2003.
PD

26-NOV-2001; 2001WO-US043151.
XX
XX 27-NOV-2000; 2000US-00724315.
XX
XX (POWD-) POWDERJECT VACCINES INC.
XX
XX Haynes JR, Arrington JE;
PI
DR WPI; 2003-221541/21.
XX
XX New compositions comprising nucleic acid adjuvants, useful in
PT immunization techniques, particularly for eliciting or enhancing an
PT immune response against an antigen in a human.
XX
PS Example 5; Page 70; 143pp; English.
XX
CC The invention relates to a composition comprising: (a) a first nucleic
CC acid sequence that is a truncated A subunit coding region obtained or
CC derived from a bacterial ADP-ribosylating exotoxin; and (b) a second
CC nucleic acid sequence that is a truncated B subunit coding region
CC obtained or derived from a bacterial ADP-ribosylating exotoxin. Each of
CC the truncated subunit coding regions has a 5' deletion and encodes a
CC subunit peptide not having an amino terminal bacterial signal peptide.
CC The composition is useful for eliciting an immune response against an
CC antigen or for manufacturing a medicament for enhancing an immune
CC response in a vertebrate subject (specifically a human) against an
CC antigen. The composition is particularly useful as nucleic acid adjuvants
CC for use in immunisation techniques. The present sequence is that of a HIV
CC gp120 peptide, used in examples of the invention to test for the adjuvant
CC effects of plasmids pPUV2002 and pPUV2003 in enhancing the humoral and
CC cellular immune responses to HIV-1 gp120. (Updated on 23-Oct-2003 to
XX standardise OS field)
XX
SQ Sequence 15 AA;

Query Match 85.7%; Score 66; DB 6; Length 15;
Best Local Similarity 86.7%; Pred. No. 0.0041;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 RIQGGGGRFVITGK 15
   |||||
Db 1 RIQGGGGRFVITGK 15
   |||||

RESULT 170
ADH60862
ID ADH60862 standard; peptide; 15 AA.
XX
XX ADH60862;
AC
XX
XX 25-MAR-2004 (first entry)
DT HIV gp120 peptide.
DE
XX Bacterial exotoxin; immune response; bacterial infection; vaccine;
KW Human immunodeficiency virus; HIV.
XX
XX Human immunodeficiency virus.
OS
XX US2003162733-A1.
PN
XX 28-AUG-2003.
PD
XX 26-NOV-2001; 2001US-00993307.
PF
XX 27-NOV-2000; 2000US-0253381P.
XX
XX (HAYN/) HAYNES J R.
PA (ARRI/) ARRINGTON J.
XX
XX Haynes JR, Arrington J;
PI
XX

```

DR WPI; 2003-897945/82.

XX New composition comprising first or second nucleic acid sequence, which

PT is a truncated A or B subunit coding region obtained or derived from a

PT bacterial ADP-ribosylating exotoxin, useful as a vaccine against

PT bacterial infection.

XX

PS Example 5; SEQ ID NO 21; 72pp; English.

XX

CC The present invention relates to a new composition comprising first and

CC second nucleic acid sequences. The first or second nucleic acid sequence

CC is a truncated A or B subunit coding region, respectively, derived from a

CC bacterial ADP-ribosylating exotoxin, with the provision that each of the

CC truncated subunit coding regions has a 5' deletion and encodes a subunit

CC peptide not having an amino terminal bacterial signal peptide. The

CC invention is useful for enhancing an immune response against bacterial

CC infection. The present sequence is Human immunodeficiency virus gp120

CC peptide.

XX

XX Sequence 15 AA;

CC

Query Match 85.7%; Score 66; DB 7; Length 15;

Best Local Similarity 86.7%; Pred. No. 0.0041;

Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 RIQGGGGRFVITGK 15

DB |||||

1 RIQGGGGRFVITGK 15

RESULT 171

ADRI8865

ID ADRI8865 standard; peptide; 16 AA.

XX

AC ADRI8865;

XX

DT 04-NOV-2004 (first entry)

XX

DE V3-IIIB beta-hairpin related peptide SEQ ID NO:24.

XX

XX three-dimensional atomic structural conformation;

KW protein co-ordinate data; V3 loop peptide; HIV-1; envelope glycoprotein;

KW gp120; human monoclonal antibody 447-52D;

KW murine monoclonal antibody 0.5 beta; immunogen; immunogenic;

KW V3 loop epitope; HIV-1 infectivity inhibitor; anti-HIV; vaccine;

KW HIV-1 infection.

XX

OS Human immunodeficiency virus 1.

OS Synthetic.

XX

PN WO2004069863-A2.

XX

PD 19-AUG-2004.

XX

PF 04-FEB-2004; 2004WO-US003304.

XX

PR 04-FEB-2003; 2003US-0444682P.

XX

XX (UNNY ) UNIV NEW YORK STATE.

PA (YEDA ) YEDA RES & DEV CO LTD.

XX

PI Anglistar J, Sharon M, Schapira M, Zolla-Pazner S, Rosen O;

XX

DR WPI; 2004-625447/60.

XX

XX Composition for inhibiting HIV-1 infection, comprises isolated peptide

PT molecule that mimics atomic structural conformation of V3 loop peptide of

PT HIV-1 envelope glycoprotein that is bound to, and constrained by human

PT monoclonal antibody.

XX

XX Example 7; SEQ ID NO 24; 127pp; English.

PS

XX The present invention describes a composition (C1) which comprises an

CC

CC isolated peptide molecule or isostere that mimics the three-dimensional

CC (3D) atomic structural conformation of the V3 loop peptide of the HIV-1

CC envelope glycoprotein gp120 that is bound to, and constrained by, human

CC monoclonal antibody (MAB) 447-52D, murine MAB 0.5 beta or an antigen

CC binding fragment of the MAB, where the constrained V3 loop peptide

CC differs in conformation from the same V3 loop peptide when it is in free

CC form. Also described: (1) identifying (M1) from several existing

CC compounds a molecule that is useful as an HIV-1 V3 loop immunogen or as

CC an inhibitor of binding of HIV-1 to a chemokine receptor/HIV-1 co-

CC receptor on the surface of a receptor-bearing target cell; (2) designing

CC a molecule that is useful as an HIV-1 V3 loop immunogen or as an

CC inhibitor of binding of HIV-1 to a chemokine receptor/HIV-1 co-receptor

CC on the surface of a receptor-bearing target cell; (3) a composition (C2)

CC that is useful as an HIV-1 V3 loop immunogen or as an inhibitor of

CC binding of HIV-1 to a chemokine receptor/HIV-1 co-receptor on the surface

CC of a receptor-bearing target cell; (4) an immunogenic composition (C3)

CC for induction of an anti-HIV-1 antibody response specific for a V3 loop

CC epitope, comprising (C1) and an adjuvant; (5) a pharmaceutical

CC composition (C4) useful for blocking the interaction of HIV-1 with an R5

CC or X4 co-receptor and thereby inhibiting HIV-1 infectivity, comprising

CC (C1) and a carrier or excipient; (6) a computing platform for generating

CC a 3D model of a constrained HIV V3 view peptide; (7) a computer generated

CC model representing the conformationally constrained structure of a V3

CC loop peptide that is bound to 447-52D or 0.5beta MAB or its antigen

CC binding fragments, comprising a 3D atomic structure defined by NC; and

CC (8) a computer readable medium (CM) comprising, in a retrievable format,

CC data that includes a set of structure coordinates defining a 3D structure

CC of a V3 loop peptide that is conformationally constrained by being bound

CC to 447-52D or 0.5beta MAB or its antigen binding fragment. (C1) has anti-

CC HIV activities, and can be used in vaccines, and as an inhibitor of

CC binding of HIV-1 to chemokine receptor/HIV-1 co-receptor. (C1) is useful

CC for in vivo inhibition of HIV-1 infection. (C1) or (C2) is useful for

CC producing a medicament utilised for treating or preventing HIV-1

CC infection. (C3) or (C4) is useful for inducing in a subject an anti-HIV-1

CC neutralising antibody response specific for a V3 loop epitope. (C4) is

CC useful for preventing an HIV-1 infection in an uninfected subject at risk

CC for such infection or for inhibiting viral spread and disease progression

CC in an infected subject. The present sequence represents a peptide used in

CC the exemplification of the present invention.

XX

XX Sequence 16 AA;

QY Query Match 85.7%; Score 66; DB 8; Length 16;

Best Local Similarity 100.0%; Pred. No. 0.0044;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGGGGRFVITI 13

DB |||||

4 RIQGGGGRFVITI 16

RESULT 172

AAR04060

ID AAR04060 standard; peptide; 21 AA.

XX

AC AAR04060;

XX

DT 25-MAR-2003 (revised)

XX

DT 23-JUL-1992 (first entry)

XX

DE Epitope comprising residues 308-327 of HIV env gp 120.

XX

KW Human immunodeficiency virus; retrovirus; vaccine; antibodies; HBC; HBe;

KW antigen; hepatitis B virus; HBV; core.

XX

XX Synthetic.

OS

XX JP2069194-A.

PN

XX 08-MAR-1990.

PD

XX 02-SEP-1988; 88JP-00220770.

PF

XX



```

PR 02-SEP-1998; 88JP-00220770.
XX (KAGA ) KAGAKU OYOBI KESSEI RYOHO.
XX
XX WPI; 1990-119518/16.
XX N-FSDB; AAQ02417.
XX
XX Antigen granule comprising HBC or HBE antigen - and HIV neutralised
XX epitope obtd. by expression of recombinant prod., for e.g. vaccine.
XX
XX Claim Disclosure; Fig 4; 11pp; Japanese.
XX
XX The synthetic epitope is used in a complex with either the hepatitis B
XX core antigen (HBC) or a sol. cleavage prod. of HBC (HBe), to prepare a
XX vaccine. The peptide corresponds to residues 308-327 of the HIV env
XX glycoprotein 120, with an N-terminal initiation Met. (Updated on 25-MAR-
XX 2003 to correct PA field.)
XX
XX Sequence 21 AA;
SQ
    Query Match      85.7%; Score 66; DB 2; Length 21;
    Best Local Similarity 100.0%; Pred. No. 0.0056;
    Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQRGPGRAFTVI 13
Db 9 RIQRGPGRAFTVI 21
    |||||
    |||||

RESULT 173
ID AAE20149 standard; peptide; 24 AA.
XX
XX AAE20149;
XX
XX 29-AUG-2003 (revised)
XX 18-JUN-2002 (first entry)
XX
XX Human immunodeficiency virus type 1 (HIV-1) V3IIIB peptide.
XX
XX Human immunodeficiency virus type 1; HIV-1; adjuvant; immunomodulator;
XX alpha-2-macroglobulin; 3-O-deacylated monophosphoryl lipidA; MPL; GM-CSF;
XX granulocyte macrophage colony stimulating factor; immune response;
XX vaccine; V3IIIB peptide.
XX
XX Human immunodeficiency virus 1.
XX
XX WO200215930-A1.
XX
XX 28-FEB-2002.
XX
XX 27-AUG-2001; 2001WO-US026589.
XX
XX 25-AUG-2000; 2000US-0227624P.
XX
XX (UYDU-) UNIV DUKE.
XX
XX Haynes BF, Liao H, Patel DD;
XX
XX WPI; 2002-269315/31.
XX
XX Use of 2-macroglobulin (2Masterisk), 3-O-deacylated monophosphoryl lipid
XX A (MPL) and granulocyte macrophage colony stimulating factor (GM-CSF) for
XX eliciting an immune response.
XX
XX Example 2; Page 21; 53pp; English.
XX
XX The invention relates to a composition comprising activated alpha-2-
XX macroglobulin (alpha 2M asterisk ), 3-O-deacylated monophosphoryl lipid A
XX (MPL) and granulocyte macrophage colony stimulating factor (GM-CSF). The
XX invention also relates to an adjuvant suitable for use in multivalent HIV
XX immunogenic compositions. The compositions is useful for eliciting an
XX immune response. The present sequence is human immunodeficiency virus

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CC type 1 (HIV-1) V3IIIB peptide used in the exemplification of the
CC invention. (Updated on 29-AUG-2003 to standardise OS field)
XX
XX Sequence 24 AA;
SQ
    Query Match      85.7%; Score 66; DB 5; Length 24;
    Best Local Similarity 100.0%; Pred. No. 0.0063;
    Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQRGPGRAFTVI 13
Db 12 RIQRGPGRAFTVI 24
    |||||
    |||||
    |||||

RESULT 174
ID AAR63820 standard; peptide; 25 AA.
XX
XX AAR63820;
XX
XX 16-OCT-2003 (revised)
XX 25-MAR-2003 (revised)
XX 29-JUN-1995 (first entry)
XX
XX HIV-1 gp120-23 epitope amino acids 296-230.
XX
XX Human immunodeficiency virus type 1; HIV-1; gp120 epitopes; vaccines;
XX HIV neutralising antibodies.
XX
XX Human immunodeficiency virus 1.
XX
XX WO9423746-A1.
XX
XX 27-OCT-1994.
XX
XX 15-APR-1994; 94WO-SE000340.
XX
XX 16-APR-1993; 93US-00048976.
XX
XX (SYNT-) SYNTELLO VACCINE DEV AB.
XX
XX Vahlne A, Svennerholm B, Rymo L, Jeansson S, Horal P;
XX WPI; 1994-341488/42.
XX
XX New peptide(s) comprising HIV gp120 epitope(s) - for prodn. of vaccines
XX against HIV infections.
XX
XX Claim 1; Page 18; 77pp; English.
XX
XX AAR63809-R63849 are epitopes from the human immunodeficiency virus type 1
XX (HIV-1) gp120, by binding one or more of these epitopes to a carrier a
XX HIV vaccine is produced. These vaccines can elicit the production of HIV-
XX neutralising antibodies in monkeys, and therefore may be used to prevent
XX HIV infections, and to heighten the immune response in HIV infected
XX humans. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 16-OCT-
XX 2003 to standardise OS field)
XX
XX Sequence 25 AA;
SQ
    Query Match      85.7%; Score 66; DB 2; Length 25;
    Best Local Similarity 100.0%; Pred. No. 0.0065;
    Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RIQRGPGRAFTVI 13
Db 13 RIQRGPGRAFTVI 25
    |||||
    |||||
    |||||

RESULT 175
ID AAW22329 standard; peptide; 19 AA.
XX

```



XX PS Disclosure; Page 56; 106pp; English.

XX CC The U1 snRNP is the target of high-titre, high avidity autoantibodies

CC occurring in the systemic rheumatoid disorders of mixed connective tissue

CC disease, scleroderma and systemic lupus erythematosus. It has been found

CC that some sites in the U1 snRNP 70K protein (see AAR62120-R62135) are

CC homologous to sites in HIV-1 gp120/41 (AAR62136-R62152) and that anti-RNP

CC autoantibodies can be used to neutralise HIV-1. In particular, the

CC sequence AAR62152 from HIV-1 gp120 matches a consensus binding sequence

CC which is necessary and sufficient for high affinity binding to U1 RNA.

CC (Updated on 25-MAR-2003 to correct for high affinity binding to U1 RNA.

CC correct OS field.)

XX SQ Sequence 12 AA;

Query Match 81.8%; Score 63; DB 2; Length 12;

Best Local Similarity 100.0%; Pred. No. 0.0096;

Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTIGK 15  
|||||

Db 1 RGPGRFVTIGK 12

RESULT 178

AAW54932

ID AAW54932 standard; peptide; 12 AA.

XX AC AAW54932;

XX DT 25-SEP-1998 (first entry)

XX DE HIV gp120 envelope protein, peptide 127, analogue 267d.

XX KW Immunoadsorbent; immunoassay; HIV gp120; immunogen; antibody; Human.

XX OS Human immunodeficiency virus.

XX PN US5763160-A.

XX PD 09-JUN-1998.

XX PF 07-JUN-1995; 95US-00488252.

XX PR 12-FEB-1988; 88US-00155321.

XX PR 01-MAR-1991; 91US-00683262.

XX PR 09-JUL-1991; 91US-00726605.

XX PR 19-OCT-1994; 94US-00326676.

XX PA (UNBI-) UNITED BIOMEDICAL INC.

XX PI Wang CY;

XX DR WPI; 1998-347301/30.

XX PT HIV gp120 peptides - useful as immunoassay reagents or vaccine

XX PT components.

XX PS Example 8; Column 21/22; 34pp; English.

XX CC Peptides AAW54903-W54941 can be used as an immunoabsorbent in an

CC immunoassay for detecting antibodies to HIV gp120, or as an immunogen for

CC eliciting antibodies to HIV in a mammal

XX SQ Sequence 12 AA;

Query Match 81.8%; Score 63; DB 2; Length 12;

Best Local Similarity 100.0%; Pred. No. 0.0096;

Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTIGK 15  
|||||

Db 1 RGPGRFVTIGK 12

RESULT 179

AAW54932

ID AAW54932 standard; peptide; 12 AA.

XX AC AAW54932;

XX DT 07-DEC-2001 (first entry)

XX DE Vaccine related MHC ligand peptide SEQ ID NO:535.

XX KW Glutamic acid; glutamine; vaccine; major histocompatibility complex; MHC;

KW immunomodulator; antiallergic; endocrine; neuroprotectant; virucidal;

KW bactericidal; antiparasitic; fungicidal; cytostatic; medicine;

KW pharmaceutical; immune disorder; immune deficiency; autoimmune;

KW hypersensitivity; allergy; graft rejection; infection; hormonal disorder;

KW central nervous system disease; cancer; melanoma; anti-melanoma vaccine;

KW human immunodeficiency virus.

XX OS Homo sapiens.

XX PN WO200170772-A2.

XX PD 27-SEP-2001.

XX PF 22-MAR-2001; 2001WO-FR000872.

XX PR 23-MAR-2000; 2000FR-00003711.

XX PA (FABR ) FABRE MEDICAMENT SA PIERRE.

XX PI Klinguer-Hamour C, Corvaia N, Beck A, Goetsch L;

XX DR WPI; 2001-611470/70.

XX PT Stabilized pharmaceutical containing N-terminal glutamic acid or

XX PT glutamine, useful e.g. in anti-melanoma vaccines, is an addition salt

XX PT with strong acid.

XX PS Claim 9; Page 122; 149pp; French.

XX CC The present invention describes a pharmaceutical compound (I) that

CC contains an N-terminal glutamic acid (Glu) or glutamine (Gln) residue in

CC the form of an addition salt with a strong, physiologically acceptable

CC acid (II). Also described are: (a) a pharmaceutical composition

CC containing at least one (I); (b) a vaccine containing at least one (I)

CC where this is a major histocompatibility complex (MHC) ligand (Ia); (c) a

CC method for in vitro diagnosis of diseases associated with the presence of

CC (Ia); (d) a kit for method (c) that includes a (Ia); and (e) a process

CC for preparing (I). (I) has immunomodulator, endocrine, antiallergic,

CC neuroprotectant, virucidal, bactericidal, antiparasitic, fungicidal, and

CC cytostatic activities. (I) are useful, in human or veterinary medicine,

CC in pharmaceutical compositions (for treating immune disorders, e.g.

CC immune deficiency, autoimmune states, hypersensitivity, allergy, graft

CC rejection, infection, hormonal disorders and central nervous system

CC diseases), also, where (I) is a MHC ligand (Ia), in vaccines for

CC treatment or prevention of: (i) viral, bacterial, parasitic or fungal

CC infections; or (ii) of cancers. A particular application is in anti-

CC melanoma vaccines. (I) are also useful for in vitro diagnosis of diseases

CC associated with interactions between MHC and (I), e.g. melanoma and human

CC immunodeficiency virus infection. AAW54932 to AAW54952 represent peptides

CC which can be used in pharmaceutical compounds from the present invention

XX SQ Sequence 12 AA;

Query Match 81.8%; Score 63; DB 4; Length 12;

Best Local Similarity 100.0%; Pred. No. 0.0096;

Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 RGPGRFVTIGK 14  
|||||

Db 1 QRGPGRAFTVIG 12

RESULT 180  
AAW76864  
ID AAW76864 standard; peptide; 14 AA.  
XX AAW76864;  
AC AAW76864;  
XX 25-JAN-1999 (first entry)  
DT Fusion immunoglobulin heavy chain HIV gp120 B cell epitope #34.  
DE  
XX B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IgH;  
KW human immune deficiency virus; HIV; tolerance; treatment; therapy;  
KW prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;  
KW microbial infection; autoimmune disease; antibody; apoptosis;  
KW antiviral T cell immunity.  
XX  
OS Mus sp.  
OS Homo sapiens.  
XX WO9836087-A1.  
PN  
XX 20-AUG-1998.  
PD  
XX 13-FEB-1998; 98WO-US02766.  
PF  
XX 13-FEB-1997; 97US-0040581P.  
PR  
XX (AMNA-) AMERICAN NAT RED CROSS.  
PA  
XX Scott D, Zambidis E;  
PI  
XX WPI; 1998-506315/43.  
DR  
XX New fusion immunoglobulin heavy chain including gp120 epitopes and  
PT related complete antibodies - DNA, vectors and transformed cells, used to  
PT induce tolerance to the epitopes for treatment of human immune deficiency  
PT virus infection.  
XX  
PS Claim 10; Page 119; 154pp; English.  
XX  
CC This sequence is an epitope used in the construction of a novel fusion  
CC immunoglobulin heavy chain (IgH) protein with a mammalian, especially  
CC human, IgH chain fused in frame at its N-terminus to one or more human  
CC immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or  
CC infected cells are used to tolerate subjects to gp120 epitopes and to  
CC maintain this tolerance, particularly for treatment of HIV infection,  
CC optionally together with other therapeutic/prophylactic agents such as  
CC vaccines, chemotherapeutic agents and immune response modifiers. Such  
CC proteins can be used against other diseases where an immune response is  
CC deleterious, e.g. microbial infection, tumours or autoimmune disease.  
CC Induction of tolerance suppresses production of antibodies against gp120,  
CC so prevents or inhibits 'bystander' apoptosis of uninfected T cells that  
CC are bound to gp120 protein, maximising induction of protective antiviral  
CC T cell immunity  
XX  
SQ Sequence 14 AA;  
Query Match 81.8%; Score 63; DB 2; Length 14;  
Best Local Similarity 100.0%; Pred. No. 0.011;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 4 RGPGRGFAFTVIGK 15  
Db 1 RGPGRGFAFTVIGK 12  
RESULT 181  
AAR04476  
ID AAR04476 standard; protein; 23 AA.  
XX

AC AAR04476;  
XX 09-SEP-2004 (revised)  
DT 25-MAR-2003 (revised)  
DT 20-SEP-1990 (first entry)  
XX Human immunodeficiency virus hybrid peptide RPI40.  
DE  
XX HIV isolates HIV-IIIB and HIV-RF; hybrid peptide RPI40; therapy; AIDS;  
KW principal neutralising domain; antibodies; diagnosis; prophylaxis.  
XX Synthetic.  
OS  
XX WO9003984-A.  
PN  
XX 19-APR-1990.  
PD  
XX 03-OCT-1988; 88US-00252949.  
PF  
XX 03-OCT-1988; 88US-00252949.  
PR  
XX 01-JUN-1989; 89US-00359543.  
PR  
XX 19-SEP-1989; 89US-00407663.  
XX (REPK) REPLIGEN CORP.  
PA  
XX Rusche JR, Putney SD, Javaherian K, Farley J, Grimaila R;  
PI Lynn DU, Petrobre J;  
PI  
XX WPI; 1990-147824/19.  
DR  
XX Principal neutralising domain of HIV variants - used for producing  
PT peptide(s) and antibodies for diagnosis, prophylaxis and/or therapy  
PT therapy of HIV infection.  
XX  
XX Claim 8 (59); Page 76; 108pp; English.  
PS  
XX Peptide RPI40 comprises segments of the Principal Neutralising Domain  
CC (envelope protein) from isolates HIV-RF and HIV-IIIB. The last Cys  
CC residue is added for the purpose of crosslinking to carrier proteins.  
CC Cysteine residues may be added, so that the residues at or near both ends  
CC form a disulfide bond, giving peptide a loop-like configuration, which  
CC can be utilised to enhance immunogenic properties of the peptides.  
CC Protein is capable of eliciting, and/or binding with, neutralising  
CC antibodies. The neutralising domain is bounded by cysteine residues which  
CC occur at positions 296 and 331. The peptides can be used as immunogens  
CC or screening reagents to generate or identify poly- or monoclonal  
CC antibodies. See also AAR04427-R04506 and AAR04273-Q04279. (Updated on 25-  
CC MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PA  
CC field.) (Updated on 25-MAR-2003 to correct PI field.)  
XX  
CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key  
XX Sequence 23 AA;  
SQ  
Query Match 81.8%; Score 63; DB 2; Length 23;  
Best Local Similarity 85.7%; Pred. No. 0.017;  
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
Qy 2 IQRGPGRAFTVIGK 15  
Db 7 ITRGPGRAFTVIGK 20  
RESULT 182  
AAW38249  
ID AAW38249 standard; peptide; 16 AA.  
XX AAW38249;  
AC  
XX 19-MAR-1998 (first entry)  
DT  
XX Tip of HIV-IIIB V3 loop peptide of gp120.  
DE  
XX

KW Multivalent chimeric peptide; tandem repeat unit; human; mucin 1; MUC1;  
 KW Omega loop sequence; prophylaxis; therapy; V3 loop peptide;  
 XX pathogenic virus neutralisation; gp120; HIV-IIIB.  
 XX Human immunodeficiency virus.  
 XX WO9728187-A2.  
 XX  
 PD 07-AUG-1997.  
 XX  
 PF 29-JAN-1997; 97WO-US001726.  
 XX  
 PR 31-JAN-1996; 96US-00594403.  
 PR 15-OCT-1996; 96US-00730244.  
 XX  
 PA (POPU-) POPULATION COUNCIL INC.  
 XX  
 PI Fontenot JD, Phillips DM;  
 XX  
 XX WPI; 1997-402551/37.  
 DR  
 XX  
 PT New multivalent chimeric peptide(s) for neutralising pathogenic microbes  
 PT - comprising a loop structure of human mucin 1 and an omega loop of an  
 PT immunoglobulin superfamily protein.  
 XX  
 PS Example 2; Page 39; 63pp; English.  
 XX  
 CC The present sequence was used in the development of a novel multivalent  
 CC chimeric peptide, comprising at least 2 tandemly repeated units, where  
 CC the 1st portion of the repeated unit comprises a human mucin 1 (MUC1)  
 CC sequence which forms an extended connector and a base of a loop structure  
 CC of human MUC1, and a 2nd portion comprising an immunoglobulin super  
 CC family protein Omega loop sequence. In the peptide, the natural structure  
 CC of MUC1 tandem repeats can be used to present an Omega loop sequence in a  
 CC functional conformation that is both multivalent and biologically active.  
 CC It can provide prophylactic and therapeutic agents which have the binding  
 CC specificity of an immunoglobulin super family member protein but do not  
 CC have the entire protein's backbone. It can be used to neutralise  
 CC pathogenic viruses, e.g. human immunodeficiency virus (HIV)  
 XX  
 XX Sequence 16 AA;  
 SQ  
 Query Match 81.2%; Score 62.5; DB 2; Length 16;  
 Best Local Similarity 93.3%; Pred. No. 0.015;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;  
 Qy 1 RIQGPGRFAVTVIGK 15  
 |||||  
 Db 3 RIQGPGRFAVTVIGK 16  
 |||||  
 RESULT 183  
 AAR27465  
 ID AAR27465 standard; protein; 21 AA.  
 XX  
 AC AAR27465;  
 XX  
 XX 25-MAR-2003 (revised)  
 DT 24-FEB-1993 (first entry)  
 XX  
 DE V3 peptide from HIV-1 (IIIB).  
 XX  
 XX Cytotoxic T lymphocyte; CTL; NVAC; ALVAC; HIV-1 IIIB; env;  
 KW memory precursor; CTL antigen receptor; V3 loop; gp120; canarypox virus;  
 KW Copenhagen strain; vaccinia virus; virulence factor; deletion loci;  
 KW recipient loci.  
 XX  
 OS Synthetic.  
 XX  
 XX WO9215672-A1.  
 PN  
 XX 17-SEP-1992.  
 PD  
 XX

PF 09-MAR-1992; 92WO-US001906.  
 XX  
 PR 07-MAR-1991; 91US-00666056.  
 PR 11-JUN-1991; 91US-00713967.  
 PR 06-MAR-1992; 92US-00847951.  
 XX  
 PA (VIRO-) VIROGENETICS CORP.  
 XX  
 XX Paoletti E, Perkus ME, Taylor J, Tartaglia J, Norton EK;  
 PI Riviere M, De Taisene C, Limbach KJ, Johnson GP, Pincus SE, Cox WI;  
 PI Francis J, Gettig RR;  
 XX  
 DR WPI; 1992-331718/40.  
 XX  
 XX Vaccine comprises recombinant, attenuated pox-virus - use for vaccinating  
 PT against viral infections such as rabies, hepatitis B, HIV, HSV, EBV, CMV,  
 PT mumps etc.  
 XX  
 XX Disclosure; Page 295; 456pp; English.  
 XX  
 CC The sequences given in AAR27465-67 were used to perform assays for  
 CC cytotoxic T lymphocytes (CTL). Mice were inoculated with cells  
 CC transformed with NVAC or ALVAC recombinants expressing the HIV-1 IIIB  
 CC env gene. These mice generated CTL's and memory precursors of CTL's. The  
 CC target cells were pulsed overnight with the peptide sequences given to  
 CC test specificity of CTL antigen receptor recognition of the V3 loop  
 CC region of HIV IIIB gp120. ALVAC is derived from a canarypox virus and  
 CC NVAC is derived from Copenhagen strain vaccinia virus which have been  
 CC modified by deletion of non-essential regions of the genome encoding  
 CC known or potential virulence factors. The deletion loci were engineered  
 CC as recipient loci for the insertion of foreign genes. See also AAQ35501-  
 CC 864. (Updated on 25-MAR-2003 to correct FN field.)  
 XX  
 SQ Sequence 21 AA;  
 Query Match 81.2%; Score 62.5; DB 2; Length 21;  
 Best Local Similarity 93.3%; Pred. No. 0.019;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;  
 Qy 1 RIQGPGRFAVTVIGK 15  
 |||||  
 Db 8 RIQGPGRFAVTVIGK 21  
 |||||  
 RESULT 184  
 AAR31219  
 ID AAR31219 standard; peptide; 21 AA.  
 XX  
 AC AAR31219;  
 XX  
 XX 24-OCT-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 09-JAN-2003 (revised)  
 DT 18-MAY-1993 (first entry)  
 XX  
 DE V3 peptide from HIV-1 IIIB.  
 XX  
 XX Human immunodeficiency virus; V3 loop.  
 KW  
 XX Human immunodeficiency virus 1.  
 OS  
 XX WO9222641-A1.  
 PN  
 XX 23-DEC-1992.  
 PD  
 XX 12-JUN-1992; 92WO-US005107.  
 PF  
 XX 14-JUN-1991; 91US-00715921.  
 PR 11-JUN-1992; 92US-00897382.  
 PR  
 XX (VIRO-) VIROGENETICS CORP.  
 PA  
 XX Paoletti E, Tartaglia J, Cox WI;  
 PI

XX WPI; 1993-018128/02.  
 XX Modified recombinant virus with inactivated non-essential genetic  
 PT functions - comprises e.g. vaccinia or avipox virus, used as HIV vaccine.  
 XX  
 XX Example 5; Page 65; 159pp; English.  
 XX  
 CC The peptide represents the V3 loop epitope of HIV-1 IIIB. The peptide was  
 CC used to test the specificity of cytotoxic T lymphocyte antigen receptor  
 CC recognition of the V3 loop region of HIV IIIB gp120. See also AAR31218-  
 CC 26. (Updated on 09-JAN-2003 to add missing OS field.) (Updated on 25-MAR-  
 CC 2003 to correct PN field.) (Updated on 24-OCT-2003 to standardise OS  
 CC field)  
 XX  
 SQ Sequence 21 AA;  
 Query Match 81.2%; Score 62.5; DB 2; Length 21;  
 Best Local Similarity 93.3%; Pred. No. 0.019;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;  
 QY 1 RIQRGPGRAFTVIGK 15  
 |||||  
 Db 8 RIQRGPGRAFTV-GK 21  
 |||||  
 RESULT 185  
 AAR31278  
 ID AAR31278 standard; peptide; 12 AA.  
 XX  
 AC AAR31278;  
 XX  
 DT 12-FEB-1993 (first entry)  
 XX  
 DE HIV principal determinant peptide.  
 XX  
 KW AIDS; ARC; human immunodeficiency virus; vaccine; Neisseria;  
 KW meningitidis b; outer membrane protein complex; OMPC; PND135-12.  
 XX  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT Modified-site 1 /note= "bonds to the OMPC of the conjugate via this site"  
 FT  
 XX  
 PN EP467700-A.  
 XX  
 PD 22-JAN-1992.  
 XX  
 PF 19-JUL-1991; 91EP-00306598.  
 XX  
 PR 19-JUL-1990; 90US-00555339.  
 PR 19-JUL-1990; 90US-00555966.  
 PR 19-JUN-1991; 91US-00715276.  
 PR 19-JUN-1991; 91US-00715278.  
 XX  
 PA (MERI ) MERCK & CO INC.  
 XX  
 PI Leanza WJ, Marburg S, Tolman RL, Emini EA;  
 XX  
 DR WPI; 1992-026505/04.  
 XX  
 FT Conjugate proteins comprising HIV peptide components - useful for  
 FT preparing vaccines for e.g. AIDS or for treating infections.  
 XX  
 PS Claim 12; Page 56; 63pp; English.  
 XX  
 CC The invention relates to a co-conjugate comprising an immunogenic protein  
 CC or protein complex having a first set of covalent linkages to low  
 CC molecular weight moieties which have an anionic or polyanionic character  
 CC at physiological pH, and a second set of covalent linkages to peptides  
 CC comprising HIV principal neutralizing determinants (PND's) or  
 CC immunologically equivalent peptides. Preferably at least one set of the

CC covalent linkages is comprised of maleimide derivatives; the  
 CC (poly)anionic moiety is composed of one to five residues of the anionic  
 CC form of a carboxylic, sulphononic or phosphonic acid; the immunogenic  
 CC protein is the outer membrane protein complex (OMPC) of Neisseria  
 CC meningitidis b; and the PND peptide has a linear structure, a disulphide-  
 CC bonded cyclic structure, an amide-bonded cyclic structure or a thioether-  
 CC bonded cyclic structure. The present sequence (PND135-12) is an example  
 CC of a PND peptide component used in the co-conjugate. The co-conjugate is  
 CC useful for inducing anti-peptide immune response in mammals, for inducing  
 CC HIV-neutralizing antibodies in mammals, for formulating vaccines to  
 CC prevent HIV infection or disease, including AIDS, or for treating humans  
 CC afflicted with HIV infection or disease  
 XX  
 SQ Sequence 12 AA;  
 Query Match 80.5%; Score 62; DB 2; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 0.014;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQRGPGRAFTV 12  
 |||||  
 Db 1 RIQRGPGRAFTV 12  
 |||||  
 RESULT 186  
 AAR26714  
 ID AAR26714 standard; peptide; 12 AA.  
 XX  
 AC AAR26714;  
 XX  
 DT 09-FEB-1993 (first entry)  
 XX  
 DE HIV-PND-polysaccharide-protein conjugate vaccine.  
 XX  
 KW Human immunodeficiency virus; principal neutralizing determinant;  
 KW outer membrane protein complex; OMPC; Neisseria; AIDS; PND-135-12.  
 XX  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT Modified-site 1 /note= "Joins onto polysaccharide-protein complex via  
 FT this site"  
 FT  
 XX  
 PN EP468714-A.  
 XX  
 PD 29-JAN-1992.  
 XX  
 PF 19-JUL-1990; 90US-00555558.  
 XX  
 PR 19-JUL-1990; 90US-00555558.  
 PR 19-JUL-1990; 90US-00555974.  
 PR 19-JUN-1991; 91US-00715275.  
 PR 19-JUN-1991; 91US-00715277.  
 XX  
 PA (MERI ) MERCK & CO INC.  
 XX  
 PI Marburg S, Tolman RL, Emini EA;  
 XX  
 DR WPI; 1992-034437/05.  
 XX  
 FT HIV peptide-polysaccharide-protein conjugates - used in vaccines or to  
 FT produce antibodies to prevent or treat HIV infection.  
 XX  
 PS Claim 9; Page 57; 63pp; English.  
 XX  
 CC The invention relates to a conjugate of an HIV principal neutralizing  
 CC determinant (PND), or an immunologically equivalent peptide (PEP),  
 CC covalently coupled to an immunogenic protein or protein complex through  
 CC an anionic polysaccharide linker. Pref. the immunogenic protein is the  
 CC outer membrane protein complex (OMPC) of Neisseria meningitidis b and the  
 CC PND peptide has a linear structure, a disulphide-bonded cyclic structure,  
 CC an amide-bonded cyclic structure or a thioether-bonded cyclic structure.

|            |   |
|------------|---|
| RESULT 188 |   |
| AAR58601   |   |
| ID         | AAR58601 standard; peptide; 13 AA.  |
| XX         |   |
| AC         | AAR58601;   |
| XX         |   |
| DT         | 25-MAR-2003 (revised)   |
| DT         | 01-MAY-1995 (first entry)   |
| XX         |   |
| DE         | Alkaline phosphatase 407-408 insertion.                                   |
| XX         |   |
| KW         | Alkaline phosphatase; AP; amino acid moiety; AAM.                         |
| XX         |   |
| OS         | Synthetic.  |
| XX         |   |
| PN         | WO9420636-A1.   |
| XX         |   |
| PD         | 15-SEP-1994.  |
| XX         |   |
| PF         | 09-MAR-1994; 94WO-US002539.   |
| XX         |   |
| PR         | 09-MAR-1993; 93US-00031165.   |
| PR         | 29-JUL-1993; 93US-00100708.   |
| XX         |   |
| PA         | (ABBO ) ABBOTT LAB.   |
| XX         |   |
| PI         | Brate EM, Brennan CA, Bridon DP, Jaffe KD, Krafft GA, Mandecki W;         |
| PI         | March SC, Russell JC, Yue VT;   |
| XX         |   |
| DR         | WPI; 1994-303041/37.  |
| DR         | N-PSDB; AAQ70593, AAQ70594.   |
| XX         |   |
| PT         | Genetically engineered hybrid enzymes and ligand conjugates - useful for  |
| PT         | diagnostic assay, to detect antigens and antibodies by changes in enzyme  |
| PT         | activity.   |
| XX         |   |
| PS         | Claim 8; Page 87; 133pp; English.   |
| XX         |   |
| CC         | AAR58601 is an amino acid moiety (AAM), when inserted between amino acid  |
| CC         | residues 407-408 of alkaline phosphatase (AP) (AAR58608) it enables the   |
| CC         | enzymatic activity of AP to be modulated upon the binding of a molecule   |
| CC         | to the inserted sequence. The modified AP can now be used as a diagnostic |
| CC         | assay, where the presence of specific antigens and antibodies can be      |
| CC         | inferred by changes in the enzyme's activity. (Updated on 25-MAR-2003 to  |
| CC         | correct PN field.)  |
| XX         |   |
| SQ         | Sequence 13 AA;   |
|            |   |
|            | Query Match 80.5%; Score 62; DB 2; Length 13;                             |
|            | Best Local Similarity 100.0%; Pred. No. 0.015;                            |
|            | Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0                |
| Qy         | 1 RIQRGPGRAFVT 12   |
|            |   |
| Db         | 2 RIQRGPGRAFVT 13   |
|            |   |
| RESULT 189 |   |
| AAR58602   |   |
| ID         | AAR58602 standard; peptide; 13 AA.  |
| XX         |   |
| AC         | AAR58602;   |
| XX         |   |
| DT         | 25-MAR-2003 (revised)   |
| DT         | 01-MAY-1995 (first entry)   |
| XX         |   |
| DE         | Alkaline phosphatase 167-168 insertion.                                   |
| XX         |   |
| KW         | Alkaline phosphatase; AP; amino acid moiety; AAM.                         |
| XX         |   |
| OS         | Synthetic.  |
| XX         |   |





CC The invention relates to a co-conjugate comprising an immunogenic protein  
 CC or protein complex having a first set of covalent linkages to low  
 CC molecular weight moieties which have an anionic or polyanionic character  
 CC at physiological pH, and a second set of covalent linkages to peptides  
 CC comprising HIV principal neutralizing determinants (PND's) or  
 CC immunologically equivalent peptides. Preferably at least one set of the  
 CC covalent linkages is comprised of maleimide derivatives; the  
 CC (poly)anionic moiety is composed of one to five residues of the anionic  
 CC form of a carboxylic, sulphonic or phosphonic acid; the immunogenic  
 CC protein is the outer membrane protein complex (OMP) of *Neisseria*  
 CC meningitidis b; and the PND peptide has a linear structure, a disulphide-  
 CC bonded cyclic structure, an amide-bonded cyclic structure or a thioether-  
 CC bonded cyclic structure. The present sequence (cPND3) is an example of a  
 CC PND peptide component used in the co-conjugate. The co-conjugate is  
 CC useful for inducing anti-peptide immune response in mammals, for inducing  
 CC HIV-neutralizing antibodies in mammals, for formulating vaccines to  
 CC prevent HIV infection or disease, including AIDS, or for treating humans  
 CC afflicted with HIV infection or disease  
 XX  
 SQ Sequence 15 AA;

Query Match 80.5%; Score 62; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.017; Mismatches 0; Indels 0; Gaps 0;  
 Matches 12; Conservative 0;

QY 1 RIQGPGRGFAVT 12  
 DB 3 RIQGPGRGFAVT 14

RESULT 192  
 AAR20214  
 ID AAR20214 standard; peptide; 15 AA.

AC AAR20214;

DT 10-NOV-1992 (first entry)

XX Cyclic HIV principal neutralising determinant peptide.

DE PND; thio-ether cyclic linkage; HIV; AIDS; assay; vaccine.

XX Synthetic.

| Key              | Location/Qualifiers                                   |
|------------------|---|
| Modified-site 1  | /label= Nle   |
| Modified-site 2  | /note= "forms cyclic thio ether linkage with Cys(15)" |
| Modified-site 15 | /note= "forms cyclic thio ether linkage with Cys(2)"  |

XX EP467699-A.

PD 22-JAN-1992.

XX 19-JUL-1991; 91EP-00306597.

PR 19-JUL-1990; 90US-00555227.

XX (MERI ) MERCK & CO INC.

XX Hannah J, Tolman RL;

XX WPI; 1992-026504/04.

XX New cyclic HIV principal neutralising determinant peptide(s) - with ring  
 PT of stable thio-ether bonds used as reagents in enzyme-linked immuno-  
 PT sorbent assays or conjugates in vaccines for HIV and AIDS.

XX Claim 4; Page 13; 16pp; English.

XX The omega-mercapto groups of the Cys residues at the 2 and 15 positions

CC are bridged by o-xylylene, giving a ring system having a stable thio-  
 CC ether bond. The peptide is a preferred example of a more generic molecule  
 CC given in Claim 1, comprising the -GPER- core sequence as part of a  
 CC peptide ring system completed by a thio-ether bond formed by linking the  
 CC omega-mercapto groups of two Cys or homologous residues via xylylene. The  
 CC ring is more stable than that formed using a disulphide bond. The  
 CC peptides are useful as analytical tools, as reagents in ELISA assays, or  
 CC as reagents for making covalent conjugate immunogens. The conjugates are  
 CC useful for raising mammalian anti-peptide, anti-HIV or HIV-neutralising  
 CC immune responses and can be used as vaccines and therapeutics for AIDS  
 CC and ARC

XX Sequence 15 AA;

Query Match 80.5%; Score 62; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.017;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRGFAVT 12  
 DB 3 RIQGPGRGFAVT 14

RESULT 193  
 AAR26689  
 ID AAR26689 standard; peptide; 15 AA.

AC AAR26689;

DT 09-FEB-1993 (first entry)

XX HIV-PND-polysaccharide-protein conjugate vaccine.

DE Human immunodeficiency virus; principal neutralizing determinant;

KW outer membrane protein complex; OMPC; *Neisseria*; AIDS; cyclic; cPND3.

XX Synthetic.

| Key              | Location/Qualifiers   |
|------------------|---|
| Modified-site 1  | /label= Nle   |
| Modified-site 2  | /note= "bonded via N-terminal to polysaccharide- protein complex"   |
| Modified-site 15 | /note= "forms cyclic thioether linkage with Cys(15) via o-xylylene" |
| Modified-site 15 | /note= "forms cyclic thioether linkage with Cys(2) via o-xylylene"  |

XX EP468714-A.

PD 29-JAN-1992.

XX 19-JUL-1990; 90US-00555558.

PR 19-JUL-1990; 90US-00555558.

PR 19-JUN-1991; 91US-00715275.

XX (MERI ) MERCK & CO INC.

XX Marburg S, Tolman RL, Emini EA;

XX WPI; 1992-034437/05.

XX HIV peptide-polysaccharide-protein conjugates - used in vaccines or to  
 PT produce antibodies to prevent or treat HIV infection.

XX Claim 9; Page 53; 63pp; English.

XX The invention relates to a conjugate of an HIV principal neutralizing

CC determinant (PND), or an immunologically equivalent peptide (PEP),  
 CC covalently coupled to an immunogenic protein or protein complex through  
 CC an anionic polysaccharide linker. Pref. the immunogenic protein is the  
 CC outer membrane protein complex (OMP) of *Neisseria meningitidis* b and the  
 CC PND peptide has a linear structure, a disulphide-bonded cyclic structure,  
 CC an amide-bonded cyclic structure or a thioether-bonded cyclic structure.  
 CC The present sequence (cPND3) is an example of a PND peptide component.  
 CC The mercapto groups of Cys(2) and Cys(15) are bridged by o-xylylene. The  
 CC conjugates are used for inducing HIV-neutralising antibodies or for  
 CC making vaccines to prevent contraction of HIV infection or disease. The  
 CC antibodies can be used for passively protecting against infection by HIV,  
 CC or for protecting against proliferation of HIV post-infection, or for  
 CC treating AIDS, or in diagnostic assays  
 XX  
 SQ Sequence 15 AA;

Query Match 80.5%; Score 62; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.017; 0; Mismatches 0; Indels 0; Gaps 0;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTV 12  
 DB 3 RIQRGPGRAFTV 14  
 |||||

RESULT 194  
 AAR58606  
 ID AAR58606 standard; peptide; 15 AA.

AC AAR58606;  
 DT 25-MAR-2003 (revised)  
 DT 01-MAY-1995 (first entry)  
 XX  
 DE Alkaline phosphatase 91-93 replacement.  
 XX  
 KW Alkaline phosphatase; AP; amino acid moiety; AAM.  
 XX  
 OS Synthetic.

XX WO9420636-A1.  
 PN 15-SEP-1994.

PF 09-MAR-1994; 94WO-US002539.  
 XX  
 PR 09-MAR-1993; 93US-00031165.  
 PR 29-JUL-1993; 93US-00100708.  
 XX  
 PA (ABBO ) ABBOTT LAB.

XX Brate EM, Brennan CA, Bridon DP, Jaffe KD, Krafft GA, Mandecki W;  
 PI March SC, Russell JC, Yue VT;  
 XX WPI; 1994-303041/37.

XX Genetically engineered hybrid enzymes and ligand conjugates - useful for  
 PT diagnostic assay, to detect antigens and antibodies by changes in enzyme  
 PT activity.

PS Claim 8; Page 88; 133pp; English.

XX AAR58606 is an amino acid moiety (AAM), when it replaces the amino acid  
 CC residues 91-93 of alkaline phosphatase (AP) (AAR58608) it enables the  
 CC enzymatic activity of AP to be modulated upon the binding of a molecule  
 CC to the inserted sequence. The modified AP can now be used as a diagnostic  
 CC assay, where the presence of specific antigens and antibodies can be  
 CC inferred by changes in the enzymes activity. (Updated on 25-MAR-2003 to  
 CC correct PN field.)

XX Sequence 15 AA;

Query Match 80.5%; Score 62; DB 2; Length 15;

Best Local Similarity 100.0%; Pred. No. 0.017;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFTV 12  
 DB 3 RIQRGPGRAFTV 14  
 |||||

RESULT 195  
 AAR33336  
 ID AAR33336 standard; peptide; 14 AA.

AC AAR33336;  
 DT 25-MAR-2003 (revised)  
 DT 06-JUL-1993 (first entry)

XX Sequence of peptide which corresp. to the V3 loop region of gp120 of HIV-  
 DE 1 isolate IIIB.

XX Monoclonal antibody; NM-01; HIV-1; gp120; gp160.

XX Synthetic.

XX WO9304090-A1.

XX 04-MAR-1993.

XX 24-AUG-1992; 92WO-US007111.

XX 22-AUG-1991; 91US-00748562.

XX (NISP ) MISSIN SHOKUHN KAISHA LTD.

XX Ohno T;

XX WPI; 1993-093943/11.

XX Monoclonal antibodies against HIV-1 gp120 and gp160 proteins - for  
 PT treating and preventing HIV-1 infection.

XX Example; Page 20; 57pp; English.

XX MN-01 is a monoclonal antibody. In order to characterize the viral  
 CC epitope recognized by NM-01, the antibody was screened by ELISA for  
 CC reactivity with overlapping peptides corresp. to the amino acid sequence  
 CC of the V3 loop region of HIV-1 gp120 (AAR33332, AAR33333, AAR33334).  
 CC While there was no detectable reactivity over background of MAb-01 with  
 CC the peptides corresp. to AAS 302-316 or 322-336 of the V3 loop, binding  
 CC of the antibody to the peptide representing AAS 3122-326 was apparent.  
 CC The extent of this reactivity with other HIV-1 isolates was screened with  
 CC peptides corresp. to the V3 loop region of HIV-1 isolates IIB, RF, CDC4,  
 CC NV/5, Z6, Z2 and ELI (AAR33335-R33342). These results indicate that  
 CC monoclonal antibody NM-01 recognizes an epitope of the V3 loop of gp120  
 CC of multiple HIV-1 isolates having the amino acid sequence AAR33343. NM-01  
 CC is also putatively reactive with the RF-like peptide set out in AAR33344.  
 CC The variable region of the heavy and light chain of monoclonal antibody  
 CC NM-01 were cloned by PCR and sequenced. Nucleotides 1-21 and 334-363 of  
 CC AAQ37472 corresp. to the PCR primers used to amplify NM-01 light chain  
 CC sequences and nucleotides 1-27 and 385-402 of AAQ57471 corresp. to the  
 CC PCR primers used to amplify NM-01 heavy chain sequences. (Updated on 25-  
 CC MAR-2003 to correct PN field.)

XX Sequence 14 AA;

Query Match 77.9%; Score 60; DB 2; Length 14;  
 Best Local Similarity 85.7%; Pred. No. 0.031;  
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 IORGPGRAFTVIGK 15  
 DB 1 IIRGPGRAFTVIGK 14  
 |||||

```

RESULT 196
AAR48604
ID AAR48604 standard; peptide; 14 AA.
AC AAR48604;
XX
DT 25-MAR-2003 (revised)
DT 03-SEP-1994 (first entry)
XX
DE Sequence of portion of gp120 V3 loop peptide from HIV-1 isolate IIIB.
XX
KW Human immunodeficiency virus; HIV-1; AIDS; glycoprotein; V3 loop; gp120;
KW epitope; isolate IIIB.
XX
OS Human immunodeficiency virus 1.
XX
PN WO9404574-A1.
XX
PD 03-MAR-1994.
XX
PF 24-AUG-1993; 93WO-US007967.
XX
PR 24-AUG-1992; 92WO-US007111.
PR 22-APR-1993; 93US-00039457.
XX
PA (NISP ) NISSIN SHOKUHIN KAISHA LTD.
XX
PI Ohno T;
XX
DR WPI; 1994-083117/10.
XX
PT New humanised antibody specific for epitope on HIV-1 gp 120 - able to
PT neutralise infection of HG cells; also nucleic acid encoding it, useful
PT for passive immunisation to treat or prevent HIV-1 infection.
XX
PS Example; Table 4, Page 18; 91pp; English.
XX
CC GPGR is a portion of HIV-1 gp120 or gp160 protein. Monoclonal antibodies
CC (Mabs) that react with this and which have the capacity to neutralise the
CC infection of H9 cells in culture by live HIV-1 strains MN and IIIB are
CC claimed. Specifically illustrating the invention are the murine MAb
CC (designated NM-01) produced by hybridoma cell line HB 10726 which is
CC deposited under ATCC No. HB 10726, and the humanised versions of Ab NM-
CC 01. To identify the specific epitope of gp120 recognised by NM-01, the Ab
CC was screened for reactivity with three overlapping peptides corresp. to
CC the V3 loop region of gp120 (AAR48600-02). While there was no detectable
CC reactivity over background of MAb NM-01 with the peptides corresp. to AAs
CC 302-316 or 322-336 of the V3 loop, binding of the Ab to the peptide
CC representing AAs312-326 was apparent. The demonstration that MAb NM-01
CC binds to the V3 loop region of HIV-1MN gp120 prompted further studies on
CC the extent of this reactivity with other HIV-1 isolates. The Ab was
CC screened by ELISA for reactivity with peptides corresp. to the V3 loop
CC region of HIV-1 isolates IIIB, RF, CDC4, NY/5, Z6, Z2 and ELI. The AA
CC sequences of the peptides are given in AAR48603-10. NM-01 reacted with
CC the loop peptides from the MN, IIIB, RF, and CDC4 isolates. It showed a
CC lesser affinity for the NY/5 peptide. (Updated on 25-MAR-2003 to correct
CC PN field.)
XX
SQ Sequence 14 AA;
Query Match 77.9%; Score 60; DB 2; Length 14;
Best Local Similarity 85.7%; Pred. No. 0.031;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 2 IQRGPGRAFTVIGK 15
| : |||||
Db 1 IRIGPGRAFTVIGK 14

RESULT 197
AAW09264
ID AAW09264 standard; peptide; 14 AA.
AC AAW09264;
XX
DT 25-MAR-2003 (revised)
DT 03-SEP-1994 (first entry)
XX
DE HIV-1 strain IIIB gp120 V3 loop peptide.
XX
KW Human immunodeficiency virus type-1; HIV-1; gp120; gp160; epitope;
KW monoclonal antibody; infection; heavy chain; light chain; hybridoma;
KW complementarity determining region; CDR; V3 loop.
XX
OS Synthetic.
XX
PN US5558865-A.
XX
PD 24-SEP-1996.
XX
PF 24-AUG-1993; 93US-00111080.
XX
PR 22-AUG-1991; 91US-00748562.
PR 24-AUG-1992; 92WO-US007111.
PR 22-APR-1993; 93US-00039457.
XX
PA (NISP ) NISSIN SHOKUHIN KAISHA LTD.
XX
PI Ohno T;
XX
DR WPI; 1996-442363/44.
XX
PT New monoclonal antibodies to HIV-1 - used for the prevention, treatment
PT or diagnosis of HIV-1 infection.
XX
PS Example 2; Col 11; 56pp; English.
XX
CC The invention relates to a novel monoclonal antibody designated NM-01.
CC The antibody was raised by immunising 2-month old Balb/c mice with live
CC HIV-1 strain MN. Splenocytes from the mice were fused to P3-X63-Ag8-U1
CC cells (ATCC CRL1597). Hybridomas were screened using membranes from non-
CC infected and MN-infected H9 cells, by reacting with hybridoma culture
CC supernatants. This screening was followed by immunofluorescence and
CC radioimmunoassays. The screening isolated the hybridoma HB 10726 which
CC secretes the antibody NM-01. The peptides AAW09263-72 are derived from
CC other HIV strains and were used to determine which other HIV-1 isolates
CC antibody NM-01 reacted with. This peptide is from HIV-1 strain IIIB. The
CC antibody is used for the diagnosis of HIV-1 in a fluid e.g. blood, and
CC can be used to treat or prevent an HIV-1 infection. (Updated on 25-MAR-
CC 2003 to correct PF field.)
XX
SQ Sequence 14 AA;
Query Match 77.9%; Score 60; DB 2; Length 14;
Best Local Similarity 85.7%; Pred. No. 0.031;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 2 IQRGPGRAFTVIGK 15
| : |||||
Db 1 IRIGPGRAFTVIGK 14

RESULT 198
AAR62167
ID AAR62167 standard; peptide; 11 AA.
AC AAR62167;
XX
DT 27-AUG-2003 (revised)
DT 25-MAR-2003 (revised)
DT 03-MAY-1995 (first entry)
XX
DE HIV-1 gp120 V3 loop domain containing U1 snRNP 70K consensus epitope.
XX epitope; autoantibody; immunoinfective cluster virus;

```

KW nuclear protein antigen; systemic rheumatic disorder;  
 KW human immunodeficiency virus; HIV-1; systemic lupus erythematosus;  
 KW mixed connective tissue disease; scleroderma; glycoprotein 120;  
 KW U1 small nuclear ribonucleoprotein; U1 snRNP 70K protein.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN WO9420141-A1.  
 XX  
 XX 15-SEP-1994.  
 XX  
 XX 10-MAR-1994; 94WO-US002631.  
 XX  
 XX 11-MAR-1993; 93US-00029850.  
 XX  
 PA (UYSC-) UNIV SOUTHERN CALIFORNIA.  
 XX  
 XX Douvas A, Takehana Y, Ehresmann G;  
 XX  
 XX WPI; 1994-302689/37.  
 DR  
 XX  
 XX Methods for treating immunoinfective cluster virus infections - utilise  
 PT antibodies or fragments characteristic of auto antibodies produced by  
 PT patients with rheumatic disorders.  
 XX  
 XX Disclosure; Page 62; 106pp; English.  
 XX  
 CC Previous immunological analyses of the V3 loop of HIV-1 (AAR621159) have  
 CC localised the main neutralising domains. The target of more than 80% of  
 CC neutralising antibodies in HIV-1 infected sera from AIDS patients has now  
 CC been found to overlap the consensus binding sequence and domain A epitopes  
 CC of the U1 snRNP 70K protein. In AIDS, antibody titres are too low to  
 CC arrest the disease; however, the homologous sequences in 70K are  
 CC immunodominant targets of autoantibodies in the systemic rheumatoid  
 CC disorder of mixed connective tissue disease. The titers of such  
 CC autoantibodies exceed 10 power 7. The anti-snRNP autoantibodies will  
 CC cross-react with HIV-1 epitopes and are useful for treating HIV  
 CC infection. (Updated on 25-MAR-2003 to correct FN field.) (Updated on 27-  
 CC AUG-2003 to correct OS field.)  
 XX  
 XX Sequence 11 AA;  
 SQ  
 Query Match 75.3%; Score 58; DB 2; Length 11;  
 Best Local Similarity 100.0%; Pred. No. 0.051;  
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 4 RGPGRFVTVIG 14  
 DB 1 RGPGRFVTVIG 11  
 RESULT 199  
 AAW76852  
 ID AAW76852 standard; peptide; 11 AA.  
 XX  
 AC AAW76852;  
 XX  
 XX 25-JAN-1999 (first entry)  
 DT  
 XX Fusion immunoglobulin heavy chain HIV gp120 B cell epitope #22.  
 DE  
 XX B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IgH;  
 KW human immune deficiency virus; HIV; tolerance; treatment; therapy;  
 KW prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;  
 KW microbial infection; autoimmune disease; antibody; apoptosis;  
 KW antiviral T cell immunity.  
 XX  
 XX Mus sp.  
 OS Homo sapiens.  
 XX  
 XX WO9836087-A1.  
 PN  
 XX 20-AUG-1998.  
 PD

XX  
 PF 13-FEB-1998; 98WO-US002766.  
 XX  
 PR 13-FEB-1997; 97US-0040581P.  
 XX  
 XX (AMNA-) AMERICAN NAT RED CROSS.  
 XX  
 XX Scott D, Zambidis E;  
 PI  
 XX WPI; 1998-506315/43.  
 DR  
 XX New fusion immunoglobulin heavy chain including gp120 epitopes and  
 PT related complete antibodies - DNA, vectors and transformed cells, used to  
 PT induce tolerance to the epitopes for treatment of human immune deficiency  
 PT virus infection.  
 XX  
 XX Claim 10; Page 119; 154pp; English.  
 PS  
 XX This sequence is an epitope used in the construction of a novel fusion  
 CC immunoglobulin heavy chain (IgH) protein with a mammalian, especially  
 CC human, IgH chain fused in frame at its N-terminus to one or more human  
 CC immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or  
 CC transfect cells are used to tolerate subjects to gp120 epitopes and to  
 CC maintain this tolerance, particularly for treatment of HIV infection,  
 CC optionally together with other therapeutic/prophylactic agents such as  
 CC vaccines, chemotherapeutic agents and immune response modifiers. Such  
 CC proteins can be used against other diseases where an immune response is  
 CC deleterious, e.g. microbial infection, tumours or autoimmune disease.  
 CC Induction of tolerance suppresses production of antibodies against gp120,  
 CC so prevents or inhibits 'bystander' apoptosis of uninfected T cells that  
 CC are bound to gp120 protein, maximising induction of protective antiviral  
 CC T cell immunity  
 XX  
 XX Sequence 11 AA;  
 SQ  
 Query Match 75.3%; Score 58; DB 2; Length 11;  
 Best Local Similarity 100.0%; Pred. No. 0.051;  
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 4 RGPGRFVTVIG 14  
 DB 1 RGPGRFVTVIG 11  
 RESULT 200  
 ABB05777  
 ID ABB05777 standard; peptide; 13 AA.  
 XX  
 AC ABB05777;  
 XX  
 XX 29-AUG-2003 (revised)  
 DT 07-MAY-2002 (first entry)  
 XX  
 XX HIV gp120 related peptide SEQ ID NO:3.  
 DE  
 XX Polyfunctional base sequence; microgene; industrial; cell culture;  
 KW artificial matrix protein; transgenic animal; HIV.  
 KW Human immunodeficiency virus 1.  
 XX  
 XX WO200196558-A1.  
 PN  
 XX 20-DEC-2001.  
 PD  
 XX 15-JUN-2001; 2001WO-JP005116.  
 PF  
 XX 16-JUN-2000; 2000JP-00180997.  
 PR  
 XX (NISC-) JAPAN SCI & TECHNOLOGY CORP.  
 PA Shiba K;  
 XX  
 XX WPI; 2002-098069/13.  
 DR

XX Polyfunctional base sequence having two or more functions in different  
PT reading frames, useful for producing artificial matrix proteins for cell  
XX culture.  
PS Example 1; Page 47; 61pp; Japanese.  
XX The present invention describes a polyfunctional base sequence (N1)  
CC having two or more functions in different reading frames. Also described  
CC are: (1) a method for producing N1 and artificial gene expression vectors  
CC comprising N1; (2) transgenic non-human animals comprising N1; and (3)  
CC treatments and diagnostic reagents containing an artificial protein, N1 is  
CC artificial tissues or high molecular weight artificial proteins. N1 is  
CC useful for creating industrially useful artificial matrix proteins for  
CC cell culture. The present sequence represents a peptide which is used in  
CC an example from the present invention. (Updated on 29-AUG-2003 to  
CC standardise OS field)  
XX  
XX Sequence 13 AA;  
SQ  
Query Match 75.3%; Score 58; DB 5; Length 13;  
Best Local Similarity 91.7%; Pred. No. 0.059;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1 RIQPGGAFVT 12  
Db ||||| |||  
2 RIQPGGRTFVT 13  
RESULT 201  
AAO15659 ID AAO15659 standard; peptide; 13 AA.  
XX  
AC AAO15659;  
XX  
DT 08-NOV-2002 (first entry)  
XX  
DE Strong immune response induction-related peptide 3.  
XX  
KW Strong immune response induction; high-order protein structure formation;  
KW antigen presentation, HIV.  
XX  
OS Unidentified.  
XX  
PN WO200233074-A1.  
XX  
PD 25-APR-2002.  
XX  
PF 10-OCT-2001; 2001WO-JP008893.  
XX  
PR 13-OCT-2000; 2000JP-00314288.  
XX  
PA (NTSC-) JAPAN SCI & TECHNOLOGY CORP.  
XX  
PI Shiba K, Ohno T;  
XX  
DR WPI; 2002-519151/55.  
XX  
PT Artificial protein capable of inducing a strong immune response to a  
PT peptide group for assisting antibody production in vivo to viruses and  
PT other antigens.  
XX  
PS Example 1; Page 46; 77pp; Japanese.  
XX  
CC The invention comprises an artificial protein which induces a strong  
CC immune response to a peptide group (the protein contains all or part of  
CC the peptide group). The artificial protein assists the formation of high-  
CC order protein structure and/or assists the antigen presentation of  
CC immunocompetent cells. The artificial protein of the invention is useful  
CC for inducing a strong immune response and the preparation of effective  
CC antibodies to specific antigens, especially HIV. The present amino acid  
CC sequence represents a peptide that was used in the invention  
XX

SQ Sequence 13 AA;  
Query Match 75.3%; Score 58; DB 5; Length 13;  
Best Local Similarity 91.7%; Pred. No. 0.059;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1 RIQPGGAFVT 12  
Db ||||| |||  
2 RIQPGGRTFVT 13  
RESULT 202  
AAW24218 ID AAW24218 standard; peptide; 19 AA.  
XX  
AC AAW24218;  
XX  
DT 17-MAR-1998 (first entry)  
XX  
DE CD4+ T-lymphocyte epitope to HIV-1 V3 loop derived peptide V3-LAI-B.  
XX  
KW T-lymphocyte epitope; diagnosis; antigen; infectious disease;  
KW delayed-type hypersensitivity assay; vaccine development.  
XX  
OS Synthetic.  
OS Human immunodeficiency virus.  
XX  
FH Key Location/Qualifiers  
FT Region 5..13  
FT /note= "Mapped CD4+T-lymphocyte epitope of patient 2"  
XX  
PN WO3727462-A2.  
XX  
PD 31-JUL-1997.  
XX  
PF 27-JAN-1997; 97WO-US001084.  
XX  
PR 26-JAN-1996; 96US-0010679P.  
XX  
PA (USSA ) US DEPT ARMY GOVERNMENT US ARMY MEDICAL.  
XX  
PI Sitz KV, Brix DL;  
XX  
DR WPI; 1997-393814/36.  
XX  
PT Peptide fragments containing antigen epitope(s) used to trace diseases -  
PT used in a delayed-type hypersensitivity assay, for in vivo mapping of  
PT human T-lymphocyte epitope(s) e.g. for diagnosis, vaccine development  
PT etc.  
XX  
PS Disclosure; Page 6; 14pp; English.  
XX  
CC Peptide fragments AAW24217-20 were used to demonstrate a new method of  
CC tracing sources of infectious diseases. The method comprises preparing a  
CC short (9-50 amino acid) peptide containing at least one non-conserved  
CC epitope of an organism, injecting a composition containing the peptide  
CC intradermally into a test subject in a delayed-type hypersensitivity  
CC (DTH) assay and observing the injection site at intervals for induration.  
CC In this example CD4+ T-lymphocyte epitopes to the HIV-1 V3 loop were  
CC mapped by existing in vitro technique for two existing HIV infected  
CC individuals and used to design peptides AAW24217-20. The method allows  
CC the T-lymphocyte epitopes of a large antigen to be determined in vivo in  
CC humans. The method is useful in medicine e.g. in diagnosis, monitoring  
CC and treatment design for infectious disease exposure, active autoimmune  
CC disease, allergic diseases and malignancy. It is especially useful for  
CC tracing infectious diseases e.g HIV, particularly when a sequence is  
CC present only in certain strains of an organism, and developing suitable  
CC vaccines. Vaccinated individuals can also be tested to verify protection  
CC against a particular strain. The method allows in vivo mapping of T-  
CC lymphocyte epitopes, not previously possible. The method is simpler, more  
CC rapid and more sensitive. It can also be applied in a variety of  
CC environments e.g. undeveloped regions since specialist equipment is not  
CC required

```

XX SQ Sequence 19 AA;
Query Match 75.3%; Score 58; DB 2; Length 19;
Best Local Similarity 100.0%; Pred. No. 0.083;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GPGRAFTVIGK 15
DB 1 GPGRAFTVIGK 11

RESULT 203
AAR32408
ID AAR32408 standard; peptide; 11 AA.
XX AC AAR32408;
XX DT 25-MAR-2003 (revised)
XX DT 04-JUL-1993 (first entry)
XX DE Sequence of peptide B3 which comprises AAs 315-325 from the V3 region of
XX DE HIV-1 isolate IIb.
XX KW HIV-1; vaccine; dendritic core; ss.
XX OS Synthetic.
XX PN WO9303766-A1.
XX PD 04-MAR-1993.
XX PF 11-AUG-1992; 92WO-US006688.
XX PR 13-AUG-1991; 91US-00744281.
XX PA (REPK ) REPLIGEN CORP.
XX PA (UYRQ ) UNIV ROCKEFELLER.
XX PI Tam JP, Profy AT;
XX DR WPI; 1993-093730/11.
XX PT New multiple antigen peptide(s) as HIV vaccines - include a dendritic
XX PT core covalently bonded to peptide including the sequence IGPR.
XX PS Example; Fig 1; 35pp; English.
XX CC Nine peptides from the V3 regions of HIV-1 isolates IIb, RF and MN were
XX CC incorporated into tetravalent multiple antigen peptide systems (MAPS)
XX CC (see AAR32406-14). Parallel groups of three peptides with chain lengths
XX CC spanning from 11-24 residues were synthesised in MAPS format for each
XX CC isolate. ELIS assays demonstrated that antisera titers in mice were
XX CC closely related to the length of the IIb peptide used for the
XX CC immunisation - the longer the stronger the response. There was no
XX CC substantial antibody prodn. in mice against the other two series of
XX CC peptides, RF (B4-B6), and MN (B7-B9), except for a low reactivity in the
XX CC gp. immunised with B8 (MN isolate). Specificity tests of the B cell
XX CC response demonstrated that the T cell epitope (AAR32415) also serves as a
XX CC B cell epitope. (Updated on 25-MAR-2003 to correct PN field.)
XX SQ Sequence 11 AA;
Query Match 74.0%; Score 57; DB 2; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.072;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQRGPGRAFY 11
DB 1 RIQRGPGRAFY 11

RESULT 204
AAR32408
ID AAR32408 standard; peptide; 11 AA.
XX AC AAR32408;
XX DT 07-DEC-2001 (first entry)
XX DE Vaccine related MHC ligand peptide SEQ ID NO:533.
XX KW Glutamic acid; glutamine; vaccine; major histocompatibility complex; MHC;
XX KW immunomodulator; antiallergic; endocrine; neuroprotectant; virucidal;
XX KW bactericidal; antiparasitic; fungicidal; cytostatic; medicine;

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AAR68799
ID AAR68799 standard; peptide; 11 AA.
XX AC AAR68799;
XX DT 25-MAR-2003 (revised)
XX DT 23-AUG-1995 (first entry)
XX DE Cytotoxic T lymphocyte epitope 56 derived from env gp120 protein.
XX KW cytotoxic T lymphocyte; epitope; antigen; pathogenic; nef; gag; pol; env;
XX KW gp120; gp41; HIV; cell-mediated immunity; human immunodeficiency virus;
XX KW class II restricted.
XX OS Human immunodeficiency virus.
XX PN WO9428871-A1.
XX PD 22-DEC-1994.
XX PF 07-JUN-1994; 94WO-US006394.
XX PR 07-JUN-1993; 93US-00072718.
XX PA (ENDO-) ENDOCON INC.
XX PI Leonard RJ;
XX DR WPI; 1995-036067/05.
XX PT Implant for sustained release of pathogen-associated antigen - forming
XX PT chronic inflammatory site producing cytotoxic T-lymphocytes lysing
XX PT infected cells, esp. for treating AIDS.
XX PS Disclosure; Page 12; 35pp; English.
XX CC AAR68744-805 are cytotoxic T lymphocyte (CTL) class I and II restricted
XX CC epitopes derived from human immunodeficiency virus proteins. AAR68799
XX CC corresponds to amino acid residues 310-316 of the env gp120 protein.
XX CC These antigens are examples of peptides that can be used with an
XX CC immunogenic implant. The implant is associated with an antigen associated
XX CC with a pathogen and used to form a discrete, localised chronic
XX CC inflammation site which acts as a local 'factory' for prodn. of CTL's
XX CC which lyse cells infected with a specific pathogen. The expanded set of
XX CC pathogen-specific CTL's can eradicate or prevent development of
XX CC infection, and can also be used to treat or arrest the development of
XX CC cancers associated with infection. (Updated on 25-MAR-2003 to correct PN
XX CC field.)
XX SQ Sequence 11 AA;
Query Match 74.0%; Score 57; DB 2; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.072;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 QRQPGRAFTV 13
DB 1 QRQPGRAFTV 11

RESULT 205
AAM99430
ID AAM99430 standard; peptide; 11 AA.
XX AC AAM99430;
XX DT 07-DEC-2001 (first entry)
XX DE Vaccine related MHC ligand peptide SEQ ID NO:533.
XX KW Glutamic acid; glutamine; vaccine; major histocompatibility complex; MHC;
XX KW immunomodulator; antiallergic; endocrine; neuroprotectant; virucidal;
XX KW bactericidal; antiparasitic; fungicidal; cytostatic; medicine;

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pharmaceutical; immune disorder; immune deficiency; autoimmune; hypersensitivity; allergy; graft rejection; infection; hormonal disorder; central nervous system disease; cancer; melanoma; anti-melanoma vaccine; human immunodeficiency virus.

Mus musculus.

WO200170772-A2.

27-SEP-2001.

22-MAR-2001; 2001WO-PR000872.

23-MAR-2000; 2000FR-00003711.

(FABR ) FABRE MEDICAMENT SA PIERRE.

Klinguer-Hamour C, Corvaia N, Beck A, Goetsch L;

WPI; 2001-611470/70.

Stabilized pharmaceutical containing N-terminal glutamic acid or glutamine, useful e.g. in anti-melanoma vaccines, is an addition salt with strong acid.

Claim 9; Page 122; 149pp; French.

The present invention describes a pharmaceutical compound (I) that contains an N-terminal glutamic acid (Glu) or glutamine (Gln) residue in the form of an addition salt with a strong, physiologically acceptable acid (II). Also described are: (a) a pharmaceutical composition containing at least one (I); (b) a vaccine containing at least one (I) where this is a major histocompatibility complex (MHC) ligand (Ia); (c) a method for in vitro diagnosis of diseases associated with the presence of (Ia); (d) a kit for method (c) that includes a (Ia); and (e) a process for preparing (I). (I) has immunomodulator, endocrine, antiallergic, neuroprotectant, virucidal, bactericidal, antiparasitic, fungicidal and cytostatic activities. (I) are useful, in human or veterinary medicine, in pharmaceutical compositions (for treating immune disorders, e.g. immune deficiency, autoimmune states, hypersensitivity, allergy, graft rejection, infection, hormonal disorders and central nervous system diseases), also, where (I) is a MHC ligand (Ia), in vaccines for treatment or prevention of: (i) viral, bacterial, parasitic or fungal infections; or (ii) of cancers. A particular application is in anti-melanoma vaccines. (I) are also useful for in vitro diagnosis of diseases associated with interactions between MHC and (I). e.g. melanoma and human immunodeficiency virus infection. AM98898 to AM99592 represent peptides which can be used in pharmaceutical compounds from the present invention

Sequence 11 AA;

Query Match 74.0%; Score 57; DB 4; Length 11;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 QRGPGRAFTVI 13  
| | | | | | | | | | | |  
Db 1 QRGPGRAFTVI 11

RESULT 206  
ABP17102  
ID ABP17102 standard; peptide; 11 AA.  
XX  
AC ABP17102;  
XX  
XX  
11-SEP-2003 (revised)  
DT 15-JUL-2002 (first entry)  
XX  
XX  
HIV B27 super motif env peptide #127.  
XX  
HIV; HIV-1; human immunodeficiency virus; env; pol; gag; nef; vpr; vpu;  
KW vif; tat; cytotoxic T lymphocyte; CTL; immune response; epitope; antigen;

vaccine; HIV infection; immunisation; virucide.

Human immunodeficiency virus 1.

WO200124810-A1.

12-APR-2001.

05-OCT-2000; 2000WO-US027766.

05-OCT-1999; 99US-00412863.

(EPIM-) EPIMUNE INC.

Sette A, Sidney J, Southwood S, Livingston BD, Chesnut R;  
Baker DM, Celis E, Kubo RT, Grey HM;

WPI; 2001-354887/37.

Vaccine compositions comprising human immunodeficiency virus-1 (HIV-1) peptide groups, useful for vaccinating against HIV-1.

Claim 32; Page 219; 448pp; English.

The present invention describes a composition (I) comprising a prepared human immunodeficiency virus-1 (HIV-1) group comprising an amino acid sequence selected from 51 defined amino acid sequences (ABL25347 to ABP25397). (I) has virucide activity and can be used in vaccines. (I) may be used for immunising subjects against HIV-1 infections. The use of group-based vaccines has several advantages over traditional vaccines, particularly when compared to the use of whole antigens in vaccine compositions. There is evidence that the immune response to whole antigens is directed largely toward variable regions of the antigen, allowing for immune escape due to mutations. The groups for inclusion in an group-based vaccine may be selected from conserved regions of viral or tumour-associated antigens, which therefore reduces the likelihood of escape mutants. Furthermore, immunosuppressive groups that may be present in whole antigens can be avoided with the use of group-based vaccines. An additional advantage of an group-based vaccine approach is the ability to combine selected groups (CTL and HTL), and further, to modify the composition of the groups, achieving, for example, enhanced immunogenicity. Accordingly, the immune response can be modulated, as appropriate, for the target disease. Similar engineering of the response is not possible with traditional approaches. ABP1501 to ABP25412 represent peptide sequences used in the exemplification of the present invention. (Updated on 11-SEP-2003 to standardise OS field)

Sequence 11 AA;

Query Match 74.0%; Score 57; DB 4; Length 11;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 QRGPGRAFTVI 13  
| | | | | | | | | | | |  
Db 1 QRGPGRAFTVI 11

RESULT 207  
AAR10592  
ID AAR10592 standard; peptide; 12 AA.  
XX  
AC AAR10592;  
XX  
18-APR-1991 (first entry)  
DT  
DE  
Protease inhibitory peptide #1.  
XX  
KW  
protease inhibitor; immunoglobulins; anti-inflammatory agent;  
anti-tumour agent.  
XX  
OS  
Synthetic.





CC Induction of tolerance suppresses production of antibodies against gp120,  
 CC so prevents or inhibits 'bystander' apoptosis of uninfected T cells that  
 CC are bound to gp120 protein, maximising induction of protective antiviral  
 CC T cell immunity

XX Sequence 15 AA;

Query Match 74.0%; Score 57; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.095;  
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFY 11  
 |||||  
 Db 5 RIQPGGRAFY 15

RESULT 210

ADP76013  
 ID ADP76013 standard; peptide; 15 AA.

XX AC ADP76013;

XX DT 09-SEP-2004 (first entry)

XX DE Peptide epitope from HIV-1 gp120 protein corresponding to aa 304-318.

XX KW antigen specific activation; antibody producing cell;  
 KW non-adherent mononuclear immune cell; T helper cell;  
 KW lysosome-containing cell; differentiation.

XX OS Human immunodeficiency virus 1.

XX PN WO2004053139-A1.

XX PD 24-JUN-2004.

XX PF 10-DEC-2003; 2003WO-AU001655.

XX PR 10-DEC-2002; 2002US-0432395P.

XX PA (APOL-) APOLLO LIFE SCI PTY LTD.

XX PI Chen J;

XX DR WPI; 2004-487905/46.

XX PT In vitro antigen specific activation of antibody producing cells  
 PT comprises culturing a population of isolated, non-adherent mononuclear  
 PT immune cells for a time and under conditions sufficient to induce  
 PT differentiation of the cell.

XX PS Claim 29; SEQ ID NO 4; 88pp; English.

XX CC The invention relates to a method of in vitro antigen specific activation  
 CC of antibody producing cells by culturing a population of isolated, non-  
 CC adherent mononuclear immune cells, which population comprises T helper  
 CC cells or its functional equivalent, where the antibody producing cells  
 CC and a functionally insignificant number of lysosome-containing cells, for  
 CC a time and under conditions sufficient to induce differentiation of the  
 CC antibody producing cell. The method is useful for in vitro antigen  
 CC specific activation of antibody producing cells. This sequence  
 CC corresponds to an epitope corresponding to amino acid 304-318 of the HIV-  
 CC 1 gp120 protein and used in the method of the invention.

XX Sequence 15 AA;

Query Match 74.0%; Score 57; DB 8; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.095;  
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFY 11  
 |||||  
 Db 5 RIQPGGRAFY 15

RESULT 211

AAR25139  
 ID AAR25139 standard; protein; 17 AA.

XX AC AAR25139;

XX DT 25-MAR-2003 (revised)

XX DT 05-JAN-1993 (first entry)

XX DE SFV-HIV epitope.

XX KW Semliki forest virus; SFV; E2 protien; vaccine.

XX OS Synthetic.

XX PN WO9210578-A1.

XX PD 25-JUN-1992.

XX PF 12-DEC-1991; 91WO-SE000855.

XX PR 13-DEC-1990; 90SE-00003978.

XX PA (BIOP-) BIOPTION AB.

XX PI Garoff H, Liljestrom P;

XX DR WPI; 1992-234633/28.

XX DR N-PSDB; AAQ26034.

XX PT RNA mol. derived from alphavirus RNA genome - chimeric alphavirus antigen  
 XX and vaccine for immunisation against viral infections.

XX PS Disclosure; Fig 12; 94pp; English.

XX CC The sequence given shows a chimeric region between Semliki forest virus  
 CC (SFV) cDNA and HIV gp120. The HIV sequence was inserted into an antigenic  
 CC region of the E2 protein of SFV. This new antigen could then be used in  
 CC the production of a safe and effective vaccine. The possibility of viral  
 CC spread was eliminated by te use of a conditionally lethal mutant.  
 CC (Updated on 25-MAR-2003 to correct PN field.) (Updated on 25-MAR-2003 to  
 CC correct PI field.)

XX SQ Sequence 17 AA;

Query Match 74.0%; Score 57; DB 2; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 0.11;  
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFY 11  
 |||||  
 Db 4 RIQPGGRAFY 14

RESULT 212

AAR68645  
 ID AAR68645 standard; peptide; 21 AA.

XX AC AAR68645;

XX DT 16-OCT-2003 (revised)

XX DT 25-MAR-2003 (revised)

XX DT 30-AUG-1995 (first entry)

XX DE VP hybrid V3 loop sequence, VP.

XX KW T-cell; epitope; HIV-1; core protein; p24E; B-cell; antigen; gp160; gag;

XX KW pol; vaccine; multimeric peptide; AIDS; 3D organisation.

XX OS Human immunodeficiency virus 1.

XX XX

PH Key Location/Qualifiers  
 FT Peptide 1..10  
 FT /note= "Residues 307-316 of the V3 (BRU) loop"  
 FT Peptide 11..21  
 FT /note= "Residues 315-325 of the V3 (MN) loop"  
 XX WO9429339-A1.  
 XX 22-DEC-1994.  
 XX 08-JUN-1994; 94WO-CA000317.  
 XX 09-JUN-1993; 93US-00073378.  
 XX (CONN-) CONNAUGHT LAB LTD.  
 XX SIA CDY, Chong P, Klein MH;  
 XX WPI; 1995-036400/05.  
 XX Novel tandem synthetic HIV-1 peptide(s) - comprising T-cell epitope of  
 PT gag protein linked to B-cell epitope of V3 loop protein of an HIV-1  
 PT isolate.  
 XX Disclosure; Page 12; 69pp; English.  
 XX This sequence represents the a hybrid B-cell epitope derived from the HIV  
 CC -1 V3 (BRU) and (MN) loops. This peptide can be ligated to a T cell  
 CC epitope, eg. p24E (see also AAR68631) to form a chimeric peptide.  
 CC Chimeric peptides such as this, may then be used in the production of HIV  
 CC -1 vaccines. These peptide sequences may also be used in the production  
 CC of multimeric peptides in which the peptides are C-terminally modified by  
 CC the addition of a lys residue which is modified on its epsilon amino acid  
 CC to carry an additional copy of the peptide molecule. The linear and  
 CC multimeric peptides may be used for the treatment of AIDS by acting to  
 CC displace the binding of HIV virus to human or animal cells or by  
 CC disturbing the 3D organisation of the virus. (Updated on 25-MAR-2003 to  
 CC correct PN field.) (Updated on 16-OCT-2003 to standardise OS field)  
 XX Sequence 21 AA;  
 XX Query Match 74.0%; Score 57; DB 2; Length 21;  
 XX Best Local Similarity 91.7%; Pred. No. 0.13;  
 XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 RIQGGPGRAFTV 12  
 DB |||||  
 DB 7 RIQGGPGRAFTV 18  
 RESULT 213  
 AAW25815  
 ID AAW25815 standard; peptide; 21 AA.  
 XX AC AAW25815;  
 XX 25-MAR-2003 (revised)  
 XX 20-OCT-1997 (first entry)  
 XX Chimaeric B cell epitope peptide VP.  
 XX HIV; human immunodeficiency virus; gag; T-cell; B-cell; epitope; env;  
 XX V3 loop; vaccine; determinant; chimaeric.  
 XX Synthetic.  
 XX US5639854-A.  
 XX 17-JUN-1997.  
 XX 09-JUN-1994; 94US-00257528.  
 XX 09-JUN-1993; 93US-00073378.  
 XX 09-JUN-1993; 93US-00073378.  
 XX 09-JUN-1994; 94US-00257528.  
 XX (CONN-) CONNAUGHT LAB LTD.  
 XX Chong P, Klein MH, SIA CDY;  
 XX WPI; 1998-556461/47.  
 XX Synthetic human immunodeficiency virus-1 peptide(s) - containing T-cell  
 PT epitope and B-cell epitope(s) are candidate vaccines against HIV-1.  
 XX

XX (CONN-) CONNAUGHT LAB LTD.  
 XX Klein MH, SIA CDY, Chong P;  
 XX WPI; 1997-332082/30.  
 XX Tandem synthetic HIV peptide(s) useful as immunogens - comprising gag  
 PT protein T-cell epitope linked to env protein B-cell epitope.  
 XX Disclosure; Col 7; 41pp; English.  
 XX The invention relates to new synthetic peptides comprising at least one  
 CC amino acid sequence comprising an HIV gag protein T-cell epitope linked  
 CC at its C- or N-terminus to an amino acid sequence comprising a B-cell  
 CC epitope of the V3 loop of an HIV env protein, which can be used to  
 CC generate vaccines against HIV-1. The T-cell epitope sequence is pref.  
 CC selected from the 1-helper determinant core peptides P24E, P24N, P24L,  
 CC including CTLB-56, V3MN, CTLB-29, CTLB-55, SF2, LAI, IIB, RF, Z6, 2054,  
 CC 1714 and BX08. The peptides are chimaeric and can be linked to a branched  
 CC Lys backbone. This sequence represents a hybrid HIV-1 env protein V3 loop  
 CC B-cell epitope comprising amino acids 307-316 of the V3 loop from the BRU  
 CC strain (AAW25816) linked at its C-terminus to amino acids 315-325 of the  
 CC MN strain V3 loop (AAW25817). The VP peptide is linked to the C-terminus  
 CC of the p24E peptide to generate the chimaeric peptide VP-T-B (AAW25814).  
 CC (Updated on 25-MAR-2003 to correct PF field.)  
 XX Sequence 21 AA;  
 XX Query Match 74.0%; Score 57; DB 2; Length 21;  
 XX Best Local Similarity 91.7%; Pred. No. 0.13;  
 XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 RIQGGPGRAFTV 12  
 DB |||||  
 DB 7 RIQGGPGRAFTV 18  
 RESULT 214  
 AAW67331  
 ID AAW67331 standard; peptide; 21 AA.  
 XX AC AAW67331;  
 XX 25-JAN-1999 (first entry)  
 XX HIV-1 peptide epitope VP.  
 XX Immunogen; vaccine; HIV-1; T-cell; B-cell; epitope; core protein; gp120;  
 XX V3 loop.  
 XX Synthetic.  
 XX Human immunodeficiency virus 1.  
 XX US5817754-A.  
 XX 06-OCT-1998.  
 XX 05-JUN-1995; 95US-00464329.  
 XX 09-JUN-1993; 93US-00073378.  
 XX 09-JUN-1994; 94US-00257528.  
 XX (CONN-) CONNAUGHT LAB LTD.  
 XX Chong P, Klein MH, SIA CDY;  
 XX WPI; 1998-556461/47.  
 XX Synthetic human immunodeficiency virus-1 peptide(s) - containing T-cell  
 PT epitope and B-cell epitope(s) are candidate vaccines against HIV-1.  
 XX

PS Disclosure; Col 7; 40pp; English.

XX The invention relates to a novel immunogenic composition for use in  
CC vaccines for the treatment of HIV-1 comprising an HIV-1-derived T-cell  
CC epitope linked to an HIV-1-derived B-cell epitope. The T-cell epitopes  
CC are generally designed based on the p24 core protein and the B-cell  
CC epitopes from the V3 loop of the gp120 protein from various HIV-1  
CC strains. This peptide corresponds to a hybrid B-cell epitope which is a  
CC chimera of the B-cell epitopes V3(BRU) and V3(MN) (AAW67332-W67333),  
CC respectively. The peptide is used to generate the chimeric T- and B-cell  
CC epitope VP-T-B (AAW67330)

XX Sequence 21 AA;

Query Match 74.0%; Score 57; DB 2; Length 21;

Best Local Similarity 91.7%; Pred. No. 0.13;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQGPGRGAFVT 12  
| | | | | | | | | | | | | |  
Db 7 RIQGPGRGAFVT 18

RESULT 215

AAW99939  
ID AAW99939 standard; peptide; 21 AA.

AC AAW99939;

DT 05-MAY-1999 (first entry)

DE HIV-1 vaccine synthetic peptide SEQ ID NO:16.

KW HIV-1; human immunodeficiency virus; vaccine; T-cell epitope;  
KW gag protein; B-cell epitope; gp41 protein; chimeric; infection.

XX Synthetic.

OS Human immunodeficiency virus 1.

XX US5876731-A.

PD 02-MAR-1999.

PF 05-JUN-1995; 95US-00462507.

PR 09-JUN-1993; 93US-00073378.

PR 09-JUN-1994; 94US-00257528.

XX (CONN-) CONNAUGHT LAB LTD.

PI Chong P, Klein MH, Sia CDY;

XX WPI; 1999-189590/16.

XX Synthetic chimeric HIV polypeptides - comprising gag protein T-cell  
PT epitope linked to gp41 B-cell epitope.

XX Example 1; Col 33-34; 41pp; English.

XX The present invention describes a synthetic peptide comprising an amino  
CC acid sequence containing a T-cell epitope of an HIV gag protein linked at  
CC its C terminus to an amino acid sequence containing a B-cell epitope of  
CC an HIV gp41 protein and containing the amino acid sequence: X1LKDMX2;  
CC where X1 = E, A, G or Q, and X2 = A or T, or an amino acid sequence  
CC capable of eliciting an HIV-specific antiserum and recognizing the  
CC sequence X1LKDMX2. The synthetic peptide is useful in vaccines against  
CC HIV infection and in diagnostic applications. AAW98892 to AAW98906, and  
CC AAW99899 to AAW99989 represent synthetic peptides from the present  
XX invention

XX Sequence 21 AA;

Query Match 74.0%; Score 57; DB 2; Length 21;

Best Local Similarity 91.7%; Pred. No. 0.13;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQGPGRGAFVT 12  
| | | | | | | | | | | | | |  
Db 7 RIQGPGRGAFVT 18

RESULT 216

AAV39690  
ID AAV39690 standard; peptide; 21 AA.

AC AAV39690;

XX 17-OCT-2003 (revised)

DT 26-NOV-1999 (first entry)

DE HIV1 gag protein epitope VP-p24.

XX HIV; vaccine; immunogenic composition; T cell epitope; B cell epitope;  
KW infection; antibody; antiviral.

OS Human immunodeficiency virus 1.

XX US5951986-A.

XX 14-SEP-1999.

PF 06-JUN-1995; 95US-00467881.

XX 09-JUN-1993; 93US-00073378.

PR 09-JUN-1994; 94US-00257528.

XX (CONN-) CONNAUGHT LAB LTD.

XX Klein MH, Chong P, Sia CDY;

XX WPI; 1999-550482/46.

XX Immunogenic composition containing synthetic fusion polypeptides  
PT containing both the T and B cell epitopes of the human immunodeficiency  
PT virus, useful antigens in producing vaccines.

XX Disclosure; Col 7; 43pp; English.

XX This sequence represents a fragment of a HIV1 protein, and can be used in  
CC the immunogenic composition of the invention. The composition comprises a  
CC synthetic fusion polypeptide which includes a sequence encoding 1 or more  
CC T cell epitopes and a sequence encoding 1 or more B cell epitopes and a  
CC carrier. Both the T cell and B cell epitopes are derived from HIV  
CC proteins. The compositions are useful as vaccines against HIV infection.  
CC The composition induces HIV-1-specific polyclonal antibodies that are  
CC opsonising and antiviral. The peptide components may be selected to  
CC induce a response against different viral isolates and in subjects who  
CC recognise different T cell epitopes. (Updated on 17-OCT-2003 to  
CC standardise OS field)

XX Sequence 21 AA;

Query Match 74.0%; Score 57; DB 2; Length 21;

Best Local Similarity 91.7%; Pred. No. 0.13;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RIQGPGRGAFVT 12  
| | | | | | | | | | | | | |  
Db 7 RIQGPGRGAFVT 18

RESULT 217

AAR66418  
ID AAR66418 standard; peptide; 14 AA.

XX AAR66418;

XX 25-MAR-2003 (revised)  
 DT 03-AUG-1995 (first entry)  
 XX HIV-1 IIIB peptide 18-3.  
 XX T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KW cluster peptide; principal neutralising determinant.  
 XX Synthetic.  
 XX WO9426785-A1.  
 PN 24-NOV-1994.  
 XX 13-MAY-1994; 94WO-US005142.  
 XX 14-MAY-1993; 93US-00060988.  
 PR (USSH ) US SEC DEPT HEALTH.  
 XX Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
 PI WPI; 1995-006707/01.  
 XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 PS Example 1; Page 33; 120pp; English.  
 XX Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC in the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCLUS 3-18 and PCLUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substd. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRAP). In peptide 18-3, the Gln residue at  
 CC position 3 in peptide 18 has been replaced by a Thr residue. (Updated on  
 CC 25-MAR-2003 to correct FN field.)  
 XX Sequence 14 AA;  
 SQ Query Match 72.1%; Score 55.5; DB 2; Length 14;  
 Best Local Similarity 86.7%; Pred. No. 0.15; Mismatches 1; Indels 1; Gaps 1;  
 Matches 13; Conservative 0;  
 QY 1 RIQPGGPAFVTIGK 15  
 DB 1 RITRGPGPAFV-IGK 14  
 |||||  
 |||||  
 RESULT 218  
 AAR90229  
 ID AAR90229 standard; peptide; 15 AA.  
 XX AC AAR90229;  
 XX 06-APR-1996 (first entry)  
 XX Cyclic HIV PND peptide attached to annular antigen scaffold.  
 DE annular antigen scaffold core; AASC; HIV V3 loop; lysine;  
 KW principal neutralising determinant; PND; cyclic; vaccine.  
 XX Synthetic.  
 OS Key Location/Qualifiers  
 FH Modified-site 1  
 FT

/note= "This residue is bonded to the thiol sulphur of  
 Cys(13) via a -CO-CH2- linkage, formed by introducing a  
 bromoacetyl group onto the N-terminal and allowing the Br  
 to condense with the Cys side chain"  
 13  
 Modified-site /note= "see above"  
 15  
 Modified-site /note= "this is an epsilon-Lys residue, the alpha-amino  
 and carboxy terminals of which are incorporated into an  
 annular antigen scaffold core of formula KKKKCC as  
 described in AAR90224"  
 XX GB2282813-A.  
 PN 19-APR-1995.  
 XX 07-OCT-1994; 94GB-00020263.  
 PF 15-OCT-1993; 93US-00138514.  
 PR (MERI ) MERCK & CO INC.  
 PA Cunningham B, Hannah J, Tolman RL;  
 PI WPI; 1995-141219/19.  
 XX New poly:lysine annular core for carrying epitope(s) - esp HIV V3 loop  
 PT peptide; gonadotropin releasing hormone, malarial or bacterial peptide,  
 PT useful in vaccines.  
 XX Claim 5; Page 49; 52pp; English.  
 PS New annular antigen scaffold cores are provided for antigens or epitopes  
 CC such as HIV V3 loop peptides (e.g. the present sequence; but see also  
 CC GB2282813; AAR90219 - AAR90223), GnRH peptides, malaria antigenic  
 CC peptides or bacterial capsular polysaccharides. The scaffolds comprise a  
 CC ring of 3-10 Lys residues cyclised via a thioether linkage. The epitopes  
 CC or antigens are bonded to each of the Lys side-chain amino groups. The C-  
 CC terminus of the scaffold may be linked to a moiety such as beta-alanine  
 CC or a peptide providing a T cell epitope, a lipopeptide which may provide  
 CC an adjuvant effect, or another moiety providing a carrier function. The  
 CC scaffolds constitute effective synthetic vaccines. The present sequence  
 CC represents one of four identical thioether-cyclised HIV V3 loop peptides  
 CC which are attached to each of the four Lys residues in the the annular  
 CC scaffold core described in AAR90224  
 XX Sequence 15 AA;  
 SQ Query Match 70.1%; Score 54; DB 2; Length 15;  
 Best Local Similarity 73.3%; Pred. No. 0.27;  
 Matches 11; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1 RIQPGGPAFVTIGK 15  
 DB 1 RIHIGPGPAFYTCK 15  
 |||||  
 |||||  
 RESULT 219  
 AAR62165  
 ID AAR62165 standard; peptide; 10 AA.  
 XX AC AAR62165;  
 XX 27-AUG-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 03-MAY-1995 (first entry)  
 XX HIV-1 gp120 V3 loop neutralising domain.  
 DE epitope; autoantibody; immunoinfective cluster virus;  
 KW nuclear protein antigen; systemic rheumatic disorder;  
 KW human immunodeficiency virus; HIV-1; systemic lupus erythematosus;  
 KW mixed connective tissue disease; scleroderma; glycoprotein 120.

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XX OS Human immunodeficiency virus 1.
XX PN WO9420141-A1.
XX PD 15-SEP-1994.
XX PF 10-MAR-1994; 94WO-US002631.
XX PR 11-MAR-1993; 93US-00029850.
XX PA (UYSC-) UNIV SOUTHERN CALIFORNIA.
XX PI Douvas A, Takehana Y, Ehresmann G;
XX DR WPI; 1994-302689/37.
XX PT Methods for treating immunoinfective cluster virus infections - utilise
XX PT antibodies or fragments characteristic of auto antibodies produced by
XX PT patients with rheumatic disorders.
XX PS Disclosure; Page 62; 106pp; English.
XX CC Previous immunological analyses of the V3 loop of HIV-1 (AAR62159) have
XX CC localised the main neutralising domains. The target of more than 80% of
XX CC neutralising antibodies in HIV-1 infected sera from AIDS patients has now
XX CC been found to overlap the consensus binding sequence and domain A epitopes
XX CC of the U1 snRNP 70K protein. In AIDS, antibody titres are too low to
XX CC arrest the disease; however, the homologous sequences in 70K are
XX CC immunodominant targets of autoantibodies in the systemic rheumatoid
XX CC disorder of mixed connective tissue disease. The titres of such
XX CC autoantibodies exceed 10 power 7. The anti-snRNP autoantibodies will
XX CC cross-react with HIV-1 epitopes and are useful for treating HIV
XX CC infection. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 27-
XX CC AUG-2003 to correct OS field.)
XX SQ Sequence 10 AA;

Query Match 68.8%; Score 53; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GPGRAFTVTIG 14
DB 1 GPGRAFTVTIG 10

RESULT 220
AAW76861
ID AAW76861 standard; peptide; 10 AA.
XX AC AAW76861;
XX DT 25-JAN-1999 (first entry)
XX DE Fusion immunoglobulin heavy chain HIV gp120 B cell epitope #31.
XX KW B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IGH;
XX KW human immune deficiency virus; HIV; tolerance; treatment; therapy;
XX KW prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;
XX KW microbial infection; autoimmune disease; antibody; apoptosis;
XX KW antiviral T cell immunity.
XX OS Mus sp.
XX OS Homo sapiens.
XX PN WO9836087-A1.
XX PD 20-AUG-1998.
XX PF 13-FEB-1998; 98WO-US002766.
XX PR 13-FEB-1997; 97US-0040581P.

XX PA (AMNA-) AMERICAN NAT RED CROSS.
XX PI Scott D, Zambidis E;
XX DR WPI; 1998-506315/43.
XX PT New fusion immunoglobulin heavy chain including gp120 epitopes and
XX PT related complete antibodies - DNA, vectors and transformed cells, used to
XX PT induce tolerance to the epitopes for treatment of human immune deficiency
XX PT virus infection.
XX PS Claim 10; Page 119; 154pp; English.
XX CC This sequence is an epitope used in the construction of a novel fusion
XX CC immunoglobulin heavy chain (IGH) protein with a mammalian, especially
XX CC human, IGH chain fused in frame at its N-terminus to one or more human
XX CC immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or
XX CC transfected cells are used to tolerate subjects to gp120 epitopes and to
XX CC maintain this tolerance, particularly for treatment of HIV infection,
XX CC optionally together with other therapeutic/prophylactic agents such as
XX CC vaccines, chemotherapeutic agents and immune response modifiers. Such
XX CC proteins can be used against other diseases where an immune response is
XX CC deleterious, e.g. microbial infection, tumours or autoimmune disease.
XX CC Induction of tolerance suppresses production of antibodies against gp120,
XX CC so prevents or inhibits 'bystander' apoptosis of uninfected T cells that
XX CC are bound to gp120 protein, maximising induction of protective antiviral
XX CC T cell immunity
XX SQ Sequence 10 AA;

Query Match 68.8%; Score 53; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIORGPGRAF 10
DB 1 RIORGPGRAF 10

RESULT 221
AAW03409
ID AAW03409 standard; peptide; 13 AA.
XX AC AAW03409;
XX DT 10-OCT-1996 (first entry)
XX DE HIV principal neutralizing determinant CPND495.
XX KW conjugate; PND; HIV; principal neutralizing determinant; OMPC;
XX KW outer membrane protein complex; anionic spacer; vaccine;
XX KW human immunodeficiency virus; water-soluble.
XX OS Synthetic.
XX FT Key Location/Qualifiers
XX FT Modified-site 1 /label= Nle
XX FT /note= "the N-terminal of this norleucine residue can be
XX FT linked to Neisseria meningitidis OMPC via a specified
XX FT anionic spacer group"
XX FT Disulfide-bond 2..13
XX FT /note= "the peptide is cyclised"
XX PN GB2271995-A.
XX PD 04-MAY-1994.
XX PF 12-OCT-1993; 93GB-00020943.
XX PR 15-OCT-1992; 92US-00963327.

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PA (MERI ) MERCK & CO INC.  
 XX Tolman RL, Marburg S, Leanza WL, Lombardo VK;  
 XX WPI; 1994-128412/16.  
 XX New conjugates of outer membrane protein and HIV epitope - for generating  
 PT HIV-neutralising response, have components joined by anionic spacer to  
 PT ensure solubility of prod.  
 XX Disclosure; Page 21; 73pp; English.  
 XX A new conjugate immunogen comprises (a) the OMP of *Neisseria*  
 CC meningitidis b as a protein carrier, (b) a principal neutralizing  
 CC determinant (PND) of HIV as a peptidyl epitope against which immune  
 CC responses are desired, and (c) a low mol. wt. anionic spacer linking (a)  
 CC and (b). The conjugate is water-soluble, yet can carry a high peptide  
 CC epitope loading. It is useful as a vaccine against HIV. The present  
 CC sequence is an example of a PND used in the conjugate  
 XX  
 SQ Sequence 13 AA;  
 Query Match 68.8%; Score 53; DB 2; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 0.34;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3 QRGPGRAFTV 12  
 Db 3 QRGPGRAFTV 12  
 AAR04441  
 ID AAR04441 standard; protein; 14 AA.  
 AC AAR04441;  
 XX 09-SEP-2004 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 20-SEP-1990 (first entry)  
 XX Human immunodeficiency virus peptide RP337.  
 DE HIV-IIIB; peptide RP337; principal neutralising domain; antibodies;  
 KW diagnosis; prophylaxis; therapy; AIDS.  
 XX Synthetic.  
 OS WO9003984-A.  
 PN 19-APR-1990.  
 PD 03-OCT-1988; 88US-00252949.  
 PF 03-OCT-1988; 88US-00252949.  
 PR 01-JUN-1989; 89US-00359543.  
 PR 19-SEP-1989; 89US-00407663.  
 XX (REPK ) REPLIGEN CORP.  
 PA Rusche JR, Putney SD, Javaherian K, Farley J, Grimalla R;  
 PI Lynn DU, Petrobre J;  
 PI WPI; 1990-147824/19.  
 XX Principal neutralising domain of HIV variants - used for producing  
 PT peptide(s) and antibodies for diagnosis, prophylaxis and/or therapy  
 PT therapy of HIV infection.  
 XX Claim 8 (44); Page 76; 108pp; English.  
 PS Peptide RP335 comprises segments of the Principal Neutralising Domain  
 CC (envelope protein) from isolate HIV-IIIB. The last Cys residue is added

CC for the purpose of crosslinking to carrier proteins. Cysteine residues  
 CC can be added so that that residues at or near both ends form a disulfide  
 CC bond, thus giving the peptide a loop-like configuration, which is  
 CC utilised to enhance the immunogenic properties of the peptide. The  
 CC peptide is capable of eliciting, and/or binding with, neutralising  
 CC antibodies. The neutralising domain is bounded by cysteine residues which  
 CC occur at positions 296 and 331. Peptides can be used as immunogens or  
 CC screening reagents to generate or identify poly- or monoclonal Abs. See  
 CC also AAR04427-R04506 and AAQ04273-Q04279. (Updated on 25-MAR-2003 to  
 CC correct PR field.) (Updated on 25-MAR-2003 to correct PA field.) (Updated  
 CC on 25-MAR-2003 to correct PI field.)  
 CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key  
 XX Sequence 14 AA;  
 SQ  
 Query Match 68.8%; Score 53; DB 2; Length 14;  
 Best Local Similarity 100.0%; Pred. No. 0.36;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RIQPGGRAFP 10  
 Db 4 RIQPGGRAFP 13  
 AAR68665  
 ID AAR68665 standard; peptide; 14 AA.  
 AC AAR68665;  
 XX 16-OCT-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 06-SEP-1995 (first entry)  
 XX T cell epitope derived from V3 isolate HXB2.  
 DE T-cell; epitope; HIV-1; core protein; p24E; B-cell; antigen; gp160; gag;  
 KW pol; vaccine; multimeric peptide; AIDS; 3D organisation.  
 XX Human immunodeficiency virus 1.  
 OS WO9429339-A1.  
 PN 22-DEC-1994.  
 PD 08-JUN-1994; 94WO-CA000317.  
 PF 09-JUN-1993; 93US-00073378.  
 PR (CONN-) CONNAUGHT LAB LTD.  
 PA Sia CDY, Chong P, Klein MH;  
 PI WPI; 1995-036400/05.  
 XX Novel tandem synthetic HIV-1 peptide(s) - comprising T-cell epitope of  
 PT gag protein linked to B-cell epitope of V3 loop protein of an HIV-1  
 PT isolate.  
 XX Disclosure; Page 39; 69pp; English.  
 PS This sequence represents a T-cell epitope derived from the V3 sequence of  
 CC the HIV-1 isolate HXB2, which may be linked to a B-cell epitope from the  
 CC V3 (MN) loop from HIV-1. These chimeric peptides may then be used in the  
 CC production of HIV-1 vaccines. These peptide sequences may also be used in  
 CC the production of multimeric peptides in which the peptides are C-  
 CC terminally modified by the addition of a Lys residue which is modified on  
 CC its epsilon amino acid to carry an additional copy of the peptide  
 CC molecule. The linear and multimeric peptides may be used for the  
 CC treatment of AIDS by acting to displace the binding of HIV virus to human  
 CC or animal cells or by disturbing the 3D organisation of the virus.  
 CC (Updated on 25-MAR-2003 to correct PN field.) (Updated on 16-OCT-2003 to

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CC standardise OS field)
XX SQ Sequence 14 AA;

Query Match      68.8%; Score 53; DB 2; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.36;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRAP 10
   |||||
DB 5 RIQGPGRAP 14

RESULT 224
AAW25835
ID AAW25835 standard; peptide; 14 AA.
XX AC AAW25835;
XX XX
XX DT 25-MAR-2003 (revised)
XX DT 20-OCT-1997 (first entry)
XX DE HIV B-cell strain HXB2 env protein V3 loop peptide.
XX KW HIV; human immunodeficiency virus; gag; T-cell; B-cell; epitope; env;
XX KW V3 loop; vaccine; determinant; chimeric.
XX OS Synthetic.
XX PN US5639854-A.
XX PD 17-JUN-1997.
XX PF 09-JUN-1994; 94US-00257528.
XX XX
XX PR 09-JUN-1993; 93US-00073378.
XX PA (CONN-) CONNAUGHT LAB LTD.
XX PI Klein MH, Sia CDY, Chong P;
XX XX
XX DR WPI; 1997-332082/30.
XX XX
XX PT Tandem synthetic HIV peptide(s) useful as immunogens - comprising gag
XX PT protein T-cell epitope linked to env protein B-cell epitope.
XX PS Disclosure; Col 21; 41pp; English.
XX CC The invention relates to new synthetic peptides comprising at least one
XX CC amino acid sequence comprising an HIV gag protein T-cell epitope linked
XX CC at its C- or N-terminus to an amino acid sequence comprising a B-cell
XX CC epitope of the V3 loop of an HIV env protein, which can be used to
XX CC generate vaccines against HIV-1. The T-cell epitope sequence is pref.
XX CC selected from the T-helper determinant core peptides P24E, P24N, P24L,
XX CC P24M and P24H while the B-cell epitopes are derived from HIV strains
XX CC including CTLB-56, V3MN, CTLB-29, CTLB-55, SF2, LA1, IIB, RF, Z6, 2054,
XX CC 1714 and BX08. The peptides are chimeric and can be linked to a branched
XX CC Lys backbone. This sequence represents the B-cell env protein V3 loop
XX CC peptide from HIV-1 strain HXB2. (Updated on 25-MAR-2003 to correct PF
XX CC field.)
XX SQ Sequence 14 AA;

Query Match      68.8%; Score 53; DB 2; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.36;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRAP 10
   |||||
DB 5 RIQGPGRAP 14

RESULT 225
AAW25835
ID AAW25835 standard; peptide; 14 AA.
XX AC AAW25835;
XX XX
XX DT 25-MAR-2003 (revised)
XX DT 20-OCT-1997 (first entry)
XX DE HIV B-cell strain HXB2 env protein V3 loop peptide.
XX KW HIV; human immunodeficiency virus; gag; T-cell; B-cell; epitope; env;
XX KW V3 loop; vaccine; determinant; chimeric.
XX OS Synthetic.
XX PN US5639854-A.
XX PD 17-JUN-1997.
XX PF 09-JUN-1994; 94US-00257528.
XX XX
XX PR 09-JUN-1993; 93US-00073378.
XX PA (CONN-) CONNAUGHT LAB LTD.
XX PI Klein MH, Sia CDY, Chong P;
XX XX
XX DR WPI; 1997-332082/30.
XX XX
XX PT Tandem synthetic HIV peptide(s) useful as immunogens - comprising gag
XX PT protein T-cell epitope linked to env protein B-cell epitope.
XX PS Disclosure; Col 21; 41pp; English.
XX CC The invention relates to a novel immunogenic composition for use in
XX CC vaccines for the treatment of HIV-1 comprising an HIV-1-derived T-cell
XX CC epitope linked to an HIV-1-derived B-cell epitope. The T-cell epitopes
XX CC are generally designed based on the p24 core protein and the B-cell
XX CC epitopes from the V3 loop of the gp120 protein from various HIV-1
XX CC strains. This peptide represents the V3 loop epitope from the HIV-1
XX CC strain HXB2. (Updated on 17-OCT-2003 to standardise OS field)
XX SQ Sequence 14 AA;

Query Match      68.8%; Score 53; DB 2; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.36;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQGPGRAP 10
   |||||
DB 5 RIQGPGRAP 14

RESULT 226
AAW99959
ID AAW99959 standard; peptide; 14 AA.
XX AC AAW99959;
XX XX
XX DT 05-MAY-1999 (first entry)
XX DE HIV-1 vaccine synthetic peptide SEQ ID NO:36.
XX KW HIV-1; human immunodeficiency virus; vaccine; T-cell epitope;
XX KW gag protein; B-cell epitope; gp41 protein; chimeric; infection.
XX OS Synthetic.
XX OS Human immunodeficiency virus 1.
XX PN US5876731-A.
XX PD 02-MAR-1999.

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XX 05-JUN-1995; 95US-00462507.  
 XX PF  
 XX 09-JUN-1993; 93US-00073378.  
 PR 09-JUN-1994; 94US-00257528.  
 XX (CONN-) CONNAUGHT LAB LTD.  
 XX PA  
 XX Chong P, Klein MH, Sia CDY;  
 XX WPI; 1999-189590/16.  
 DR WPI; 1999-189590/16.  
 XX Synthetic chimeric HIV polypeptides - comprising gag protein T-cell  
 PT epitope linked to gp41 B-cell epitope.  
 XX PT  
 XX Example 1; Col 41-42; 41pp; English.  
 XX PS  
 XX The present invention describes a synthetic peptide comprising an amino  
 CC acid sequence containing a T-cell epitope of an HIV gag protein linked at  
 CC its C terminus to an amino acid sequence containing a B-cell epitope of  
 CC an HIV gp41 protein and containing the amino acid sequence: X1LKDWX2;  
 CC where X1 = E, A, G or Q, and X2 = A or T, or an amino acid sequence  
 CC capable of eliciting an HIV-specific antiserum and recognizing the  
 CC sequence X1LKDWX2. The synthetic peptide is useful in vaccines against  
 CC HIV infection and in diagnostic applications. AAW98892 to AAW98906, and  
 CC AAW98899 to AAW99989 represent synthetic peptides from the present  
 CC invention  
 XX CC  
 XX SQ Sequence 14 AA;  
 Query Match 68.8%; Score 53; DB 2; Length 14;  
 Best Local Similarity 100.0%; Pred. No. 0.36;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 1 RIQRGPGRAF 10  
 Db |||||||  
 5 RIQRGPGRAF 14  
 RESULT 227  
 AAY39757  
 ID AAY39757 standard; peptide; 14 AA.  
 XX AC AAY39757;  
 XX 17-OCT-2003 (revised)  
 DT 26-NOV-1999 (first entry)  
 XX HIV1 chimeric peptide V3-HXB2.  
 XX HIV; vaccine; immunogenic composition; T cell epitope; B cell epitope;  
 KW infection; antibody; antiviral.  
 XX Human immunodeficiency virus 1.  
 XX US5951986-A.  
 XX 14-SEP-1999.  
 XX 06-JUN-1995; 95US-00467881.  
 XX 09-JUN-1993; 93US-00073378.  
 PR 09-JUN-1994; 94US-00257528.  
 XX (CONN-) CONNAUGHT LAB LTD.  
 XX Klein MH, Chong P, Sia CDY;  
 XX WPI; 1999-550482/46.  
 DR Immunogenic composition containing synthetic fusion polypeptides  
 PT containing both the T and B cell epitopes of the human immunodeficiency  
 PT virus, useful antigens in producing vaccines.

XX Example 1; Col 22; 43pp; English.  
 XX PS  
 XX This sequence represents a fragment of a HIV1 protein, and can be used in  
 CC the immunogenic composition of the invention. The composition comprises a  
 CC synthetic fusion polypeptide which includes a sequence encoding 1 or more  
 CC T cell epitopes and a sequence encoding 1 or more B cell epitopes and a  
 CC carrier. Both the T cell and B cell epitopes are derived from HIV  
 CC proteins. The compositions are useful as vaccines against HIV infection.  
 CC The composition induces HIV-1-specific polyclonal antibodies that are  
 CC opsonising and antiviral. The peptide components may be selected to  
 CC induce a response against different viral isolates and in subjects who  
 CC recognise different T cell epitopes. (Updated on 17-OCT-2003 to  
 CC standardise OS field)  
 XX CC  
 XX SQ Sequence 14 AA;  
 Query Match 68.8%; Score 53; DB 2; Length 14;  
 Best Local Similarity 100.0%; Pred. No. 0.36;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 1 RIQRGPGRAF 10  
 Db |||||||  
 5 RIQRGPGRAF 14  
 RESULT 228  
 AAY22593  
 ID AAY22593 standard; peptide; 18 AA.  
 XX AC AAY22593;  
 XX 17-OCT-2003 (revised)  
 DT 19-OCT-1999 (first entry)  
 XX HIV putative gp120 LDL-R binding region.  
 XX HIV; LDL; low density lipoprotein; human; immune response; infection;  
 KW immunodeficiency; neoplastic tissue; myalgic encephalomyelitis; MS;  
 KW viral infection fatigue syndrome; tuberculosis; hepatitis; AIDS; ARC;  
 KW acquired immunodeficiency syndrome; AIDS related complex; gp120; LDL-R;  
 KW HIV-infected CD4 cell; immunosuppressive peptide.  
 XX Human immunodeficiency virus 1.  
 XX WO9938524-A2.  
 XX 05-AUG-1999.  
 XX 28-JAN-1999; 99WO-IB000149.  
 XX 29-JAN-1998; 98US-0072980P.  
 XX (PREN/) PRENDERGAST P T.  
 XX Prendergast PT;  
 XX WPI; 1999-494040/41.  
 XX Enhancing the immune response using a recombinant human low-density  
 PT lipoprotein receptor, useful for treating viral infections, especially  
 PT human immunodeficiency virus (HIV) infection.  
 XX Disclosure; Page 17; 24pp; English.  
 XX This sequence represents a putative gp120 low density lipoprotein  
 CC receptor (LDL-R) binding region of HIV. The invention relates to a method  
 CC for enhancing the immune response in a patient with a condition, selected  
 CC from immunodeficiency (due to a viral, bacterial, mycoplasmaic, fungal or  
 CC parasitic infection, or from the growth of neoplastic tissue), myalgic  
 CC encephalomyelitis (ME), post inoculation or viral infection fatigue  
 CC syndrome, tuberculosis, or hepatitis. The method comprises using a  
 CC pharmaceutical composition, comprising a recombinant human LDL receptor



CC or a mimic molecule to the cysteine rich domain of LDL receptor. The  
 CC human recombinant LDL receptor forms pharmaceutical compositions for: the  
 CC treatment of acquired immunodeficiency syndrome (AIDS) or ARC (AIDS  
 CC related complex); reducing syncytium formation in HIV-infected CD4 cells;  
 CC treating blood or body fluid or organs to neutralise/remove  
 CC immunosuppressive peptides and/or viruses; or treating hepatitis A, B or  
 CC C. The pharmaceutical compositions also treat a viral infection in a  
 CC human or animal host. The human recombinant LDL receptor is also useful  
 CC for manufacturing medicaments for treating all the conditions given  
 CC above. The human recombinant LDL receptor is a highly specific inhibitor  
 CC of HIV-1 replication in vitro. (Updated on 17-OCT-2003 to standardise OS  
 CC field)  
 XX

SQ Sequence 18 AA;

Query Match 68.8%; Score 53; DB 2; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 0.45;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RIQPGGRAFP 10  
 |||||  
 Db 9 RIQPGGRAFP 18

RESULT 229

AAR26890  
 ID AAR26890 standard; peptide; 20 AA.

XX AC AAR26890;  
 XX 25-MAR-2003 (revised)  
 DT 20-MAY-1998 (first entry)  
 XX HIV epitope #12.  
 DE Principle neutralising domain; PND; HIV-1; gp120; envelope; vaccine;  
 KW prophylaxis.  
 XX Synthetic.  
 XX WO9214489-A1.  
 XX PD 03-SEP-1992.  
 XX PF 14-FEB-1992; 92WO-US001303.  
 PR 14-FEB-1991; 91US-00655669.  
 XX (REPK ) REPLIGEN CORP.  
 XX Murray MG, Putney SD;  
 XX WPI; 1992-315940/38.  
 XX Hybrid polio virus useful as vaccine against HIV-1 infections - contains  
 PT epitope of heterologous protein inserted into the BC loop of polio virus.  
 XX Disclosure; Page 21; 35pp; English.

XX The sequences given in AAR26879-93 are portions of the HIV-1 principle  
 CC neutralising domain (PND) protein which were used as neutralising  
 CC epitopes. HIV-1 PND is an approx. 40 amino acid region of the external  
 CC envelope protein gp120 which forms a looped structure in native gp120.  
 CC The epitopes were inserted into the BC loop of a hybrid poliovirus. This  
 CC construct could be used as a vaccine. The vaccine may be used for  
 CC prophylaxis or treatment of human patients infected with HIV-1. (Updated  
 CC on 25-MAR-2003 to correct PN field.)  
 XX Sequence 20 AA;

Query Match 68.8%; Score 53; DB 2; Length 20;  
 Best Local Similarity 83.3%; Pred. No. 0.49;  
 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 IQRGPGRAFTV 13  
 |||||  
 Db 9 IQRGPGRAFTV 20

RESULT 230

AAR26879  
 ID AAR26879 standard; peptide; 10 AA.

XX AC AAR26879;  
 XX 25-MAR-2003 (revised)  
 DT 20-MAY-1998 (first entry)  
 XX HIV epitope #1.  
 DE Principle neutralising domain; PND; HIV-1; gp120; envelope; vaccine;  
 KW prophylaxis.  
 XX Synthetic.  
 XX WO9214489-A1.  
 XX PD 03-SEP-1992.  
 XX PF 14-FEB-1992; 92WO-US001303.  
 PR 14-FEB-1991; 91US-00655669.  
 XX (REPK ) REPLIGEN CORP.  
 XX Murray MG, Putney SD;  
 XX WPI; 1992-315940/38.  
 XX Hybrid polio virus useful as vaccine against HIV-1 infections - contains  
 PT epitope of heterologous protein inserted into the BC loop of polio virus.  
 XX Disclosure; Page 18; 35pp; English.

XX The sequences given in AAR26879-93 are portions of the HIV-1 principle  
 CC neutralising domain (PND) protein which were used as neutralising  
 CC epitopes. HIV-1 PND is an approx. 40 amino acid region of the external  
 CC envelope protein gp120 which forms a looped structure in native gp120.  
 CC The epitopes were inserted into the BC loop of a hybrid poliovirus. This  
 CC construct could be used as a vaccine. The vaccine may be used for  
 CC prophylaxis or treatment of human patients infected with HIV-1. (Updated  
 CC on 25-MAR-2003 to correct PN field.)  
 XX Sequence 10 AA;

Query Match 67.5%; Score 52; DB 2; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 0.38;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 IQRGPGRAFTV 11  
 |||||  
 Db 1 IQRGPGRAFTV 10

RESULT 231

AAR26892  
 ID AAR26892 standard; peptide; 10 AA.

XX AC AAR26892;  
 XX 25-MAR-2003 (revised)  
 DT 20-MAY-1998 (first entry)  
 XX HIV epitope #14.  
 DE Principle neutralising domain; PND; HIV-1; gp120; envelope; vaccine;  
 KW prophylaxis or treatment of human patients infected with HIV-1. (Updated  
 CC on 25-MAR-2003 to correct PN field.)

KW prophylaxis.  
 XX  
 OS Synthetic.  
 PN WO9214489-A1.  
 XX  
 XX  
 PD 03-SEP-1992.  
 XX  
 XX 14-FEB-1992; 92WO-US001303.  
 PF  
 XX 14-FEB-1991; 91US-00655669.  
 PR  
 XX (REPK ) REPLIGEN CORP.  
 PA  
 XX Murray MG, Putney SD;  
 PI WPI; 1992-315940/38.  
 XX  
 DR Hybrid polio virus useful as vaccine against HIV-1 infections - contains  
 XX epitope of heterologous protein inserted into the BC loop of polio virus.  
 PT  
 XX Disclosure; Page 23; 35pp; English.  
 PS  
 XX The sequences given in AAR26879-93 are portions of the HIV-1 principle  
 CC neutralising domain (PND) protein which were used as neutralising  
 CC epitopes. HIV-1 PND is an approx. 40 amino acid region of the external  
 CC envelope protein gp120 which forms a looped structure in native gp120.  
 CC The epitopes were inserted into the BC loop of a hybrid poliovirus. This  
 CC construct could be used as a vaccine. The vaccine may be used for  
 CC prophylaxis or treatment of human patients infected with HIV-1. (Updated  
 CC on 25-MAR-2003 to correct PN field.)  
 XX  
 XX Sequence 10 AA;  
 SQ  
 Query Match 67.5%; Score 52; DB 2; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 0.38;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 2 IQRGPGRAV 11  
 DB 1 IQRGPGRAV 10  
 RESULT 232  
 AAR33452  
 ID AAR33452 standard; peptide; 10 AA.  
 XX  
 AC AAR33452;  
 XX  
 XX 27-AUG-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 17-DEC-2001 (revised)  
 DT 03-JUL-1993 (first entry)  
 XX  
 XX Sequence of synthetic peptide which represents immunogenic region of the  
 DE V loop of HIV isolate IIB.  
 DE  
 DE Cytotoxic T lymphocyte; immunogenic peptide; V3 loop; treatment;  
 KW glycoprotein 160.  
 KW  
 XX Human immunodeficiency virus 1.  
 OS  
 XX USN7847311-N.  
 PN  
 XX 01-JAN-1993.  
 PD  
 XX 06-MAR-1992; 92US-00847311.  
 PF  
 XX 26-JAN-1988; 88US-00148692.  
 PR 18-SEP-1991; 91US-00760530.  
 PR  
 XX (USSH ) US DEPT HEALTH & HUMAN SERVICE.  
 PA  
 XX

PI Berzofsky JA, Taskeshita T, Shirai M, Pendleton CD, Kozlowski S;  
 XX WPI; 1993-093577/11.  
 DR  
 XX Peptide(s) for stimulation of cytotoxic T cells specific for HIV-1 -  
 PT which correspond to residues 318-327 of HIV-1 gp 160 envelope  
 PT glyco:protein.  
 XX  
 XX Disclosure; Page 8; 61pp; English.  
 PS  
 XX The peptide elicits cytotoxic T lymphocyte (CTL) response at concns. of  
 CC 10(-12) to 10(-6) M. It corresp. to residues 318-327 of HIV-1 strain IIB  
 CC gp. 160 envelope glycoprotein. It can be used for the treatment and/or  
 CC prophylaxis of HIV infection. (Note: Revised entry submitted to correct  
 CC the patent number format of US Government-owned NIS applications to  
 CC prevent clashes with ongoing US granted patent numbers. For further  
 CC information please visit the Derwent web site at  
 CC www.derwent.com/dwpi/updates/ntis us.html.) (Updated on 25-MAR-2003 to  
 CC correct PF field.) (Updated on 27-AUG-2003 to correct OS field.)  
 XX  
 XX Sequence 10 AA;  
 SQ  
 Query Match 67.5%; Score 52; DB 2; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 0.38;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 4 RGPGRFVTTI 13  
 DB 1 RGPGRFVTTI 10  
 RESULT 233  
 AAR95920  
 ID AAR95920 standard; peptide; 10 AA.  
 XX  
 AC AAR95920;  
 XX  
 DT 16-OCT-2003 (revised)  
 DT 14-JAN-1997 (first entry)  
 XX  
 DE HIV gp 120 antigen, component of mucosal binding compsn.  
 XX  
 KW Mucosal binding composition; mucosal binding polypeptide; antigen;  
 KW viral pathogen; sexually transmitted disease; administration; vaginal;  
 KW rectal; oral; immune response; secretory immunity; mucous; HIV-1;  
 KW glycoprotein 120; gp120.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 XX WO9616178-A1.  
 PN  
 XX 30-MAY-1996.  
 PD  
 XX 17-NOV-1995; 95WO-GB002708.  
 PF  
 XX 17-NOV-1994; 94US-00342241.  
 PR  
 XX (LEBE/) LEBENS M R.  
 XX (HOLM/) HOLMGREN J R.  
 PA  
 XX Lebens MR, Holmgren JR;  
 PI WPI; 1996-268614/27.  
 DR  
 XX Mucosal binding compositions for generating mucosal immune response -  
 PT comprises mucosal binding peptide, pref. derived from cholera toxin, and  
 PT an antigen, e.g. derived from E. coli, HIV, etc.  
 XX  
 XX Claim 29; Page 43; 65pp; English.  
 PS  
 XX A novel mucosal binding compsn. (MBC) comprises a mucosal binding  
 CC polypeptide linked to at least 1 antigen from a viral pathogen, which  
 CC causes a sexually transmitted disease (STD), e.g. the present HIV gp120  
 CC

CC antigen. The MBC, which is administered vaginally, rectally or orally,  
 CC generates a mucosal immune response against the viral STD by allowing for  
 CC the prodn. of high levels of secretory immunity, which forms the 1st line  
 CC of defence against the majority of STD. (Updated on 16-OCT-2003 to  
 CC standardise OS field)

XX Sequence 10 AA;

Query Match 67.5%; Score 52; DB 2; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 0.38;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 IORGPGRAV 11  
 DB 1 IORGPGRAV 10  
 |||||

RESULT 234  
 ID AAW76839 standard; peptide; 10 AA.

XX AC AAW76839;  
 XX DT 25-JAN-1999 (first entry)  
 XX DE Fusion immunoglobulin heavy chain HIV gp120 B cell epitope #9.  
 XX KW B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IGH;  
 XX KW human immune deficiency virus; HIV; tolerance; treatment; therapy;  
 XX KW prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;  
 XX KW microbial infection; autoimmune disease; antibody; apoptosis;  
 XX KW antiviral T cell immunity.

XX OS Mus sp.  
 XX OS Homo sapiens.

XX WO9836087-A1.

XX PD 20-AUG-1998.

XX PF 13-FEB-1998; 98WO-US002766.

XX PR 13-FEB-1997; 97US-0040581P.

XX PA (AMNA-) AMERICAN NAT RED CROSS.

XX PI Scott D, Zambidis E;

XX WPI; 1998-506315/43.

XX PT New fusion immunoglobulin heavy chain including gp120 epitopes and  
 XX related complete antibodies - DNA, vectors and transformed cells, used to  
 XX induce tolerance to the epitopes for treatment of human immune deficiency  
 XX virus infection.

XX PS Claim 10; Page 119; 154pp; English.

XX CC This sequence is an epitope used in the construction of a novel fusion  
 XX immunoglobulin heavy chain (IGH) protein with a mammalian, especially  
 XX human, IGH chain fused in frame at its N-terminus to one or more human  
 XX immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or  
 XX transfected cells are used to tolerate subjects to gp120 epitopes and to  
 XX maintain this tolerance, particularly for treatment of HIV infection,  
 XX optionally together with other therapeutic/prophylactic agents such as  
 XX vaccines, chemotherapeutic agents and immune response modifiers. Such  
 XX proteins can be used against other diseases where an immune response is  
 XX deleterious, e.g. microbial infection, tumours or autoimmune disease.  
 XX Induction of tolerance suppresses production of antibodies against gp120,  
 XX so prevents or inhibits 'bystander' apoptosis of uninfected T cells that  
 XX are bound to gp120 protein, maximising induction of protective antiviral  
 XX T cell immunity

XX Sequence 10 AA;

Query Match 67.5%; Score 52; DB 2; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 0.38;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 IORGPGRAV 11  
 DB 1 IORGPGRAV 10  
 |||||

RESULT 235  
 ID AAY10172 standard; peptide; 10 AA.

XX AC AAY10172;

XX DT 12-MAY-1999 (first entry)

XX DE T cell epitope/MHC ligand SEQ ID NO:102.

XX KW Cytotoxic T-lymphocyte response; CTL; antigen; lymphatic system;  
 XX KW immunisation; tumour; infectious disease; immunotherapy; cancer;  
 XX KW malignant melanoma; viral disease; hepatitis; AIDS.

XX OS Synthetic.

XX OS Human immunodeficiency virus 1.

XX PN WO9902183-A2.

XX PD 21-JAN-1999.

XX PF 10-JUL-1998; 98WO-US014289.

XX PR 10-JUL-1997; 97CA-02209815.

XX PR 10-DEC-1997; 97US-00988320.

XX PA (CTLI-) CTL IMMUNOTHERAPIES CORP.

XX PI Kuendig TW, Simard JJI;

XX WPI; 1999-120514/10.

XX PT Inducing a cytotoxic T lymphocyte response - by maintaining a level of  
 XX antigen in the lymphatic system of a mammal so as to provide a sustained  
 XX CTL response, used to treat, e.g. AIDS.

XX PS Disclosure; Page 27; 199pp; English.

XX CC The present invention describes a method of inducing and/or sustaining an  
 XX immunological cytotoxic T lymphocyte (CTL) response in a mammal. The  
 XX method comprises: (a) delivering an antigen to the mammal at a level to  
 XX induce an immunological CTL response in the mammal; and (b) maintaining  
 XX the level of the antigen in the mammal's lymphatic system to maintain the  
 XX immunologic CTL response. The method can be used for the delivery of e.g.  
 XX a differentiation antigen, a tumour-specific multilineage antigen, an  
 XX embryonic antigen, an oncogene antigen, a mutated tumour-suppressor gene  
 XX antigen, or a viral antigen. They can be used for the treatment of  
 XX disease such as cancer, e.g. malignant melanoma or infectious disease,  
 XX e.g. viral disease such as hepatitis or AIDS. Sustained antigen delivery  
 XX to the lymphatic system provides for potent CTL stimulation that takes  
 XX place in the milieu of the lymphoid organ, and it sustains stimulation  
 XX that is necessary to keep CTL active, cytotoxic and recirculating through  
 XX the body. AAY10071 to AAY10639 represent examples of peptide antigens  
 XX given in the present invention

XX Sequence 10 AA;

Query Match 67.5%; Score 52; DB 2; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 0.38;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRFVTI 13  
 |||||

|            |  |
|------------|--|
| AC         | AAY10164;  |
| XX         |  |
| DT         | 12-MAY-1999 (first entry)  |
| XX         |  |
| DE         | T cell epitope/MHC ligand SEQ ID NO:94.  |
| XX         |  |
| KW         | Cytotoxic T-lymphocyte response; CTL; antigen; lymphatic system;   |
| KX         | immunisation; tumour; infectious disease; immunotherapy; cancer;   |
| KW         | malignant melanoma; viral disease; hepatitis; AIDS.  |
| XX         |  |
| OS         | Synthetic.   |
| OS         | Human immunodeficiency virus 1.  |
| PN         | WO9902183-A2.  |
| XX         |  |
| PD         | 21-JAN-1999.   |
| XX         |  |
| Pf         | 10-JUL-1998; 98WO-US014289.  |
| XX         |  |
| PR         | 10-JUL-1997; 97CA-02209815.  |
| PR         | 10-DEC-1997; 97US-00988320.  |
| XX         |  |
| PA         | (CTL)- CTL IMMUNOTHERAPIES CORP.   |
| XX         |  |
| PI         | Kuendig TM, Simard JJJ;  |
| XX         |  |
| DR         | WPI; 1999-120514/10.   |
| XX         |  |
| PT         | Inducing a cytotoxic T lymphocyte response - by maintaining a level of<br>antigen in the lymphatic system of a mammal so as to provide a sustained<br>CTL response, used to treat, e.g. AIDS.  |
| PT         |  |
| PS         | Disclosure; Page 26; 199pp; English.   |
| XX         |  |
| CC         | The present invention describes a method of inducing and/or sustaining an<br>immunological cytotoxic T lymphocyte (CTL) response in a mammal. The<br>method comprises: (a) delivering an antigen to the mammal at a level to<br>induce an immunological CTL response in the mammal; and (b) maintaining<br>the level of the antigen in the mammal's lymphatic system to maintain the<br>immunologic CTL response. The method can be used for the delivery of e.g.<br>a differentiation antigen, a tumour-specific multilineage antigen, an<br>embryonic antigen, an oncogene antigen, a mutated tumour-suppressor gene<br>antigen, or a viral antigen. They can be used for the treatment of<br>disease such as cancer, e.g. malignant melanoma or infectious disease,<br>e.g. viral disease such as hepatitis or AIDS. Sustained antigen delivery<br>to the lymphatic system provides for potent CTL stimulation that takes<br>place in the milieu of the lymphoid organ, and it sustains stimulation<br>that is necessary to keep CTL active, cytotoxic and recirculating through<br>the body. AAY10071 to AAY10639 represent examples of peptide antigens<br>given in the present invention |
| XX         |  |
| SQ         | Sequence 10 AA;  |
|            |  |
|            | Query Match 67.5%; Score 52; DB 2; Length 10;  |
|            | Best Local Similarity 100.0%; Pred.No. 0.38;   |
|            | Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0   |
| Qy         | 4 RGPGRFVTTI 13  |
|            |  |
| Dd         | 1 RGPGRFVTTI 10  |
|            |  |
| RESULT 238 |  |
| AAY03691   |  |
| ID         | AAY03691 standard; peptide; 10 AA.   |
| XX         |  |
| AC         | AAY03691;  |
| XX         |  |
| DT         | 17-OCT-2003 (revised)  |
| DT         | 07-JUN-1999 (first entry)  |
| XX         |  |
| DE         | Amino acid fragment of CTL epitope of HIV/SIV (H) string.  |
| XX         |  |

KW CD8+ T-cell; immune response; antigen; priming composition; CTL; epitope;  
 KW cytotoxic T lymphocyte; boosting; poxvirus vector; PVV; pathogen; tumour;  
 KW malaria; parasite; P. falciparum; viral; bacterial; parasitic; cancer;  
 KW melanoma; HIV; breast; colon; vaccination.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN WO9856919-A2.  
 XX  
 PD 17-DEC-1998.  
 XX  
 PF 09-JUN-1998; 98WO-GB001681.  
 XX  
 PR 09-JUN-1997; 97GB-00011957.  
 XX  
 PA (ISIS-) ISIS INNOVATION LTD.  
 XX  
 PI McMichael AJ, Hill AVS, Gilbert SC, Schneider J, Plebanski M;  
 PI Hanke T, Smith GL, Blanchard T;  
 XX  
 DR WPI; 1999-070325/06.  
 XX  
 XX Generating CD8-positive T cell response to target antigen using  
 PT recombinant poxvirus - for treating or preventing malaria and HIV  
 PT infection, also epitope strings from Plasmodium and HIV.  
 XX  
 PS Claim 43; Page 20; 85pp; English.  
 XX  
 CC The invention relates to methods and reagents for generating a protective  
 CC CD8+ T-cell immune response against at least one target antigen. The kits  
 CC of the invention comprises (i) as priming composition, a source of one or  
 CC more CD8+ T-cell [cytotoxic T lymphocytes-(CTL)] epitopes of the target  
 CC antigen, plus a carrier and (ii) as boosting composition a source of CTL  
 CC epitopes, with at least one CTL epitope the same as used in (i), with  
 CC this source being a non-replicating or replication-impaired recombinant  
 CC poxvirus vector (pV) plus a carrier. If the source of CTL epitopes in  
 CC (i) is a viral vector, then the vector in (ii) is from a different virus.  
 CC The kits are used to generate an immune response (prophylactic or  
 CC therapeutic) against pathogens or tumours, specifically against malaria  
 CC parasites such as P. falciparum, or HIV, and also many other bacterial,  
 CC viral or parasitic pathogens. The kits are also used for protective  
 CC response against melanoma and cancer of breast or colon, and generally  
 CC wherever a strong CD8+ response is protective. The boosting composition  
 CC may be used alone to boost a naturally primed response against malaria.  
 CC The specified PVV provide an excellent booster effect, better than that  
 CC from wild-type poxvirus, resulting in complete rather than partial  
 CC protection against sporozoite challenge. Also PVV are safer to use than  
 CC protection against sporozoite challenge. Also PVV are safer to use than  
 CC wild-type virus. Sequences AAY03681-704 represent CTL peptide epitopes of  
 CC the HIV/SIV (H) epitope string. (Updated on 17-OCT-2003 to standardise OS  
 CC field)  
 XX  
 SQ Sequence 10 AA;  
 Query Match 67.5%; Score 52; DB 2; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 0.38;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4 RGPGRFVTI 13  
 Db 1 RGPGRFVTI 10  
 RESULT 239  
 AAY03655  
 ID AAY03655 standard; peptide; 10 AA.  
 XX  
 AC AAY03655;  
 XX  
 DT 07-JUN-1999 (first entry)  
 XX  
 DE HIV gag CTL peptide epitope.  
 XX  
 KW CD8+ T-cell; immune response; antigen; priming composition; CTL; epitope;

KW cytotoxic T lymphocyte; boosting; poxvirus vector; PVV; pathogen; tumour;  
 KW malaria; parasite; P. falciparum; viral; bacterial; parasitic; cancer;  
 KW melanoma; HIV; breast; colon; vaccination; P1A tumour antigen.  
 OS Synthetic.  
 OS Human immunodeficiency virus 1.  
 XX  
 PN WO9856919-A2.  
 XX  
 PD 17-DEC-1998.  
 XX  
 PF 09-JUN-1998; 98WO-GB001681.  
 XX  
 PR 09-JUN-1997; 97GB-00011957.  
 XX  
 PA (ISIS-) ISIS INNOVATION LTD.  
 XX  
 PI McMichael AJ, Hill AVS, Gilbert SC, Schneider J, Plebanski M;  
 PI Hanke T, Smith GL, Blanchard T;  
 XX  
 DR WPI; 1999-070325/06.  
 XX  
 XX Generating CD8-positive T cell response to target antigen using  
 PT recombinant poxvirus - for treating or preventing malaria and HIV  
 PT infection, also epitope strings from Plasmodium and HIV.  
 XX  
 PS Example 1; Page 22; 85pp; English.  
 XX  
 CC The invention relates to methods and reagents for generating a protective  
 CC CD8+ T-cell immune response against at least one target antigen. The kits  
 CC of the invention comprises (i) as priming composition, a source of one or  
 CC more CD8+ T-cell [cytotoxic T lymphocytes-(CTL)] epitopes of the target  
 CC antigen, plus a carrier and (ii) as boosting composition a source of CTL  
 CC epitopes, with at least one CTL epitope the same as used in (i), with  
 CC this source being a non-replicating or replication-impaired recombinant  
 CC poxvirus vector (pV) plus a carrier. If the source of CTL epitopes in  
 CC (i) is a viral vector, then the vector in (ii) is from a different virus.  
 CC The kits are used to generate an immune response (prophylactic or  
 CC therapeutic) against pathogens or tumours, specifically against malaria  
 CC parasites such as P. falciparum, or HIV, and also many other bacterial,  
 CC viral or parasitic pathogens. The kits are also used for protective  
 CC response against melanoma and cancer of breast or colon, and generally  
 CC wherever a strong CD8+ response is protective. The boosting composition  
 CC may be used alone to boost a naturally primed response against malaria.  
 CC The specified PVV provide an excellent booster effect, better than that  
 CC from wild-type poxvirus, resulting in complete rather than partial  
 CC protection against sporozoite challenge. Also PVV are safer to use than  
 CC protection against sporozoite challenge. Also PVV are safer to use than  
 CC wild-type virus. Sequences AAY03653-60 represent CTL peptide epitopes  
 CC used during the course of the invention  
 XX  
 SQ Sequence 10 AA;  
 Query Match 67.5%; Score 52; DB 2; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 0.38;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4 RGPGRFVTI 13  
 Db 1 RGPGRFVTI 10  
 RESULT 240  
 AAY05357  
 ID AAY05357 standard; peptide; 10 AA.  
 XX  
 AC AAY05357;  
 XX  
 DT 17-OCT-2003 (revised)  
 DT 29-JUN-1999 (first entry)  
 XX  
 DE HIV-1 CLUVAC peptide, SEQ ID NO. 16.  
 XX  
 KW HIV-1; CLUVAC; cluster peptide vaccine construct; cytotoxic T lymphocyte;

KW protective mucosal CTL response; hepatitis A virus; papilloma virus;  
 KW feline immunodeficiency virus; feline leukaemia virus; M. tuberculosis;  
 KW Listeria monocytogenes; M. leprae; Giardia lamblia;  
 XX immune response induction.  
 OS Human immunodeficiency virus 1.  
 XX WO9912563-A2.  
 PN 18-MAR-1999.  
 XX 11-SEP-1998; 98WO-US019028.  
 XX 11-SEP-1997; 97US-0058523P.  
 PR 17-FEB-1998; 98US-0074894P.  
 XX (USSH) US DEPT HEALTH & HUMAN SERVICE.  
 XX Berzofsky JA, Belyakov IM, Derby MA, Kelsall BL, Strober W;  
 XX WPI; 1999-243663/20.  
 DR Method for inducing a protective mucosal cytotoxic T lymphocyte immune  
 PT response.  
 PT Example 3; Page 85; 86pp; English.  
 XX This sequence represents a HIV-1 cluster peptide vaccine conjugate  
 CC (CLUVAC) sequence. The invention relates to a method for inducing a  
 CC protective mucosal cytotoxic T lymphocyte (CTL) response in a mammalian  
 CC subject, which comprises contacting a mucosal tissue of the subject with  
 CC a composition comprising a purified soluble antigen. The method can  
 CC induce a protective mucosal CTL response in a subject. The method can be  
 CC used for protection against e.g. hepatitis A virus, papilloma virus,  
 CC feline immunodeficiency virus, feline leukaemia virus, Listeria  
 CC monocytogenes, M. tuberculosis, M. leprae, or Giardia lamblia. The method  
 CC induces long-lasting protective mucosal immune responses. (Updated on 17-  
 CC OCT-2003 to standardise OS field)  
 XX SQ Sequence 10 AA;  
 Query Match 67.5%; Score 52; DB 2; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 0.38;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4 RGPGRFVTI 13  
 DB 1 RGPGRFVTI 10  
 RESULT 241  
 AAY59593  
 ID AAY59593 standard; peptide; 10 AA.  
 AC AAY59593;  
 XX 12-SEP-2003 (revised)  
 DT 05-APR-2000 (first entry)  
 XX HIV-1 env peptide I-10.  
 DE HIV-1; env gene; cellular immunity; virus; therapy;  
 KW envelope glycoprotein; infection; immunisation; immune response.  
 XX Human immunodeficiency virus 1.  
 OS EP972523-A2.  
 XX 19-JAN-2000.  
 PD 27-MAY-1999; 99EP-00401265.  
 PF 29-MAY-1998; 98US-00087513.  
 PR

XX (NIHE-) JAPAN HEALTH SCI FOUND.  
 PA (AJIN) AJINOMOTO CO INC.  
 PA (UJJE-) UNIV JEFFERSON THOMAS.  
 XX Kaneko Y, Kozbor D;  
 PI WPI; 2000-099746/09.  
 DR New composition for inducing viral immunity, useful for production of HIV  
 XX vaccines.  
 PT Example 3; Page 11; 28pp; English.  
 PS This sequence represents a fragment of the HIV-1 env protein. The  
 CC invention relates to a therapeutic composition for inducing cellular  
 CC immunity against a virus, which comprises a nucleic acid encoding an  
 CC envelope glycoprotein of the virus which: (a) contains a modified  
 CC immunodominant epitope; and (b) induces cellular immunity to a conserved  
 CC epitope of the envelope glycoprotein. The nucleic acid may be introduced  
 CC into a vector DNA or a liposome and mixed with an adjuvant to prepare a  
 CC vaccine effective against and induce cellular immunity against the HIV  
 CC virus. The therapeutic composition can be used to prevent or treat  
 CC infection. Prior art methods of immunising patients against viruses which  
 CC frequently mutate have resulted in chronic immune activation and high T  
 CC cell turnover because of secondary responses induced by the V3 loop  
 CC mutated epitopes. The full length envelope glycoprotein expressed on the  
 CC cell surface or released from HIV infected cells can also trigger  
 CC detrimental effects which are essential in AIDS pathogenesis. The  
 CC composition provides antigen presenting cells (APCs) which contain the  
 CC modified envelope glycoprotein and are resistant to antibody-dependent  
 CC cell mediated cytotoxicity (ADCC), do not form syncytia, do not undergo  
 CC apoptosis and induce cellular immunity to the virus without inducing  
 CC responses of CD4+ T cells. The composition therefore redirects immune  
 CC responses towards the conserved epitope of the envelope glycoprotein,  
 CC inducing cellular immunity to multiple strains of the virus. (Updated on  
 CC 12-SEP-2003 to standardise OS field)  
 XX SQ Sequence 10 AA;  
 Query Match 67.5%; Score 52; DB 3; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 0.38;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4 RGPGRFVTI 13  
 DB 1 RGPGRFVTI 10  
 RESULT 242  
 AAY67361  
 ID AAY67361 standard; peptide; 10 AA.  
 XX AAY67361;  
 XX 25-APR-2000 (first entry)  
 DT Human immunodeficiency virus-10 (HIV-10) peptide.  
 DE Therapeutic antigen; cytotoxic T lymphocyte; CTL; CTL immune response;  
 KW cellular immune response induction method; vaccine; human; tumour;  
 XX melanoma glycoprotein 75.  
 XX Human immunodeficiency virus.  
 OS WO9963945-A2.  
 XX 16-DEC-1999.  
 PD 11-JUN-1999; 99WO-US013146.  
 PF 12-JUN-1998; 98US-0089055P.  
 XX 30-OCT-1998; 98US-0106339P.  
 PR

```

XX PA (SLOK ) SLOAN KETTERING INST CANCER RES.
XX PI Nikolic-Zugic J, Dyall R, Houghton AN;
XX XX WPI; 2000-126432/11.
XX DR
XX PT Induction of a cellular immune response to a weakly immunogenic protein,
XX PT used to target and kill tumor cells.
XX XX
XX PS Example 2; Page 15; 44pp; English.
XX XX
XX CC This sequence represents a human immunodeficiency virus (HIV-10) peptide
XX CC used in the method of the invention. The invention relates to a method
XX CC for inducing a cytotoxic T lymphocyte (CTL) immune response to non/weakly
XX CC immunogenic proteins which are expressed on tumour cells. The method for
XX CC inducing a cellular immune response to a non-immunogenic or weakly
XX CC immunogenic target peptide expressed on tumour cells of a mammalian
XX CC subject comprises administering antigen to induce a cellular immune
XX CC response to the target peptide. The antigen comprises an immunogenic
XX CC portion having a major histocompatibility complex (MHC) binding domain
XX CC which binds to the MHC and an immune recognition domain which is
XX CC recognized by T-cells. The antigen is derived from the target peptide
XX CC such that the MHC-binding portion binds to MHC with a greater affinity
XX CC than the target peptide without material alteration of the immune
XX CC recognition portion. The methods are used for inducing a cellular immune
XX CC response to a non-immunogenic or weakly immunogenic target peptide
XX CC expressed on tumour cells of a mammalian subject. The antigens and
XX CC immunogens of the invention, as well as polynucleotides encoding them,
XX CC are used in vaccine compositions against tumour cells
XX SQ Sequence 10 AA;
XX Query Match 67.5%; Score 52; DB 3; Length 10;
XX Best Local Similarity 100.0%; Pred. No. 0.38;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4 RGPGRFVTI 13
DB 1 RGPGRFVTI 10
RESULT 243
AY94398
ID AAY94398 standard; peptide; 10 AA.
XX AC AAY94398;
XX DT 21-SEP-2000 (first entry)
XX DE HIV peptide used to generate a mouse hybridoma.
XX KW Human; phage display; anti-inflammatory; antibody therapy;
XX KW inflammatory bowel disease; rheumatoid arthritis; septic shock;
XX KW multiple sclerosis; chronic inflammation; allograft rejection; panning;
XX KW tumour necrosis factor alpha; TNF; CDR3;
XX KW complementarity determining region; hybridoma.
XX OS Homo sapiens.
XX PN WO200029004-A1.
XX PD 25-MAY-2000.
XX PF 02-NOV-1999; 99WO-IL000581.
XX PR 18-NOV-1998; 98IL-00127127.
XX PA (PEPT-) PEPTOR LTD.
XX PI Plaksin D;
XX DR WPI; 2000-387610/33.

XX PT Small functional units of antibody heavy chain variable regions useful
XX XX for diagnosis and treatment of disease.
XX PS Example 1; Page 18; 48pp; English.
XX XX
XX CC The present sequence is an HIV peptide. A gene encoding a single-domain
XX CC VH protein belonging to mouse VH group 1(A) was cloned from a mouse
XX CC hybridoma generated against the present sequence in complex with H-2Dd.
XX CC The gene was amplified by PCR. The 3' primer contained a sequence which
XX CC randomised 9 amino acids in the third hypervariable loop (CDR3) of the VH
XX CC and therefore generated the single-domain VH library repertoire. CDR3
XX CC typically makes most antigen contacts in antibody combining sites. The
XX CC PCR product was reamplified to avoid non-symmetric pairing of strands due
XX CC to primer exhaustion. The final product was ligated into the phagemid
XX CC vector pCANTAB 5 E and electroporated into E. coli strain TGI. Phage
XX CC clones capable of binding a specific antigen, e.g. Tumour necrosis factor
XX CC alpha (TNFalpha), can be selected by library panning. Single-domain VH
XX CC proteins can be used to treat or diagnose associated disorders. For
XX CC example, disorders in which TNF plays a role include inflammatory bowel
XX CC disease, rheumatoid arthritis, septic shock, multiple sclerosis, chronic
XX CC inflammation and allograft rejection
XX SQ Sequence 10 AA;
XX Query Match 67.5%; Score 52; DB 3; Length 10;
XX Best Local Similarity 100.0%; Pred. No. 0.38;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4 RGPGRFVTI 13
DB 1 RGPGRFVTI 10
RESULT 244
AY94588
ID AAY94588 standard; peptide; 10 AA.
XX AC AAY94588;
XX DT 12-SEP-2003 (revised)
XX DT 10-JAN-2001 (first entry)
XX DE Mouse H2-d-class I restricted minimal cytolytic T lymphocyte epitope.
XX KW Hepatitis B virus nucleocapsid antigen; HBCAg; T cell epitope;
XX KW cytolytic T lymphocyte; immunogenic; ICE; CTL; HIV;
XX KW immunodominant core epitope; immunisation; mouse.
XX OS Human immunodeficiency virus 1.
XX PN WO200026385-A1.
XX PD 11-MAY-2000.
XX PF 05-NOV-1999; 99WO-US026291.
XX PR 05-NOV-1998; 98US-0107169P.
XX PA (POWD-) POWDERJECT VACCINES INC.
XX PI Fuller DL, Fuller JT;
XX DR WPI; 2000-451623/39.
XX XX
XX PT Use of expression vector for nucleic acid immunization that comprises
XX PT promoter and recombinant nucleic acid sequences encoding Hepatitis B core
XX PT antigen and T cell epitope from antigen.
XX PS Example 7; Page 41; 55pp; English.
XX XX
XX CC The present invention relates to an immunogenic recombinant nucleic acid
XX CC molecule. The molecule consists of a modified hepatitis B virus

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CC nucleocapsid antigen (HBcAg) with a T cell epitope sequence inserted  
 CC within the HBcAg. The creation of a unique restriction site in HBcAg  
 CC facilitated the insertion of the T cell epitope into the DNA encoding the  
 CC immunodominant core epitope of the HBcAg. An example of a suitable  
 CC insertion epitope is the present sequence. The mouse H2-d-restricted  
 CC minimal cytolytic T lymphocyte epitope of HIV LAI gp 120. Alternatively  
 CC other T cell epitopes may be inserted (AA94583, AA94584, AA94585,  
 CC AA94586, AA94587). The recombinant nucleic acid molecule may then be  
 CC used as a reagent in various nucleic acid immunisation strategies. The  
 CC advantage of this method of immunisation is that the nucleic acid  
 CC reagents that encode hybrid HBcAg generate an extremely high frequency  
 CC cellular immune response against the CTL epitope. (Updated on 12-SEP-2003  
 CC to standardise OS field)  
 CC  
 SQ Sequence 10 AA;

Query Match 67.5%; Score 52; DB 3; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 0.38;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRAFVTI 13  
 |||||  
 Db 1 RGPGRAFVTI 10

RESULT 245  
 AAB15874  
 ID AAB15874 standard; peptide; 10 AA.

AC AAB15874;  
 DT 17-JAN-2001 (first entry)  
 DE Human chemokine derived peptide #26.

KW Macrophage recruitment; chemokine derivative; MCP-1; osteoporosis;  
 KW monocyte chemoattractant protein-1; inflammation; atherosclerosis; HIV;  
 KW AIDS; stroke; psoriasis; autoimmune disease; hypertension; endotoxaemia;  
 KW basophil-mediated disease; myocardial infarction; acute ischaemia;  
 KW rheumatoid arthritis; contraception.

OS Synthetic.  
 PN WO200042071-A2.  
 XX 20-JUL-2000.

PF 12-JAN-2000; 2000WO-US000821.  
 XX 12-JAN-1999; 99US-00229071.  
 PR 17-MAR-1999; 99US-00271132.  
 PR 01-DEC-1999; 99US-00452406.

XX (NEOR-) NEORX CORP.

XX Grainger DJ, Tatalick LM;  
 DR WPI; 2000-499101/44.

PT New peptide 3, amide and heterocyclic compounds and saccharide conjugates  
 PT used for inhibiting chemokine induced activity and for treating e.g.  
 PT stroke, vascular diseases, autoimmune diseases and tumor growth.

PS Disclosure; Fig 18; 387pp; English.

XX The present invention concerns the identification of a number of  
 CC chemokines which can be used to produce derivatives, agonists and  
 CC antagonists which are then useful in disease treatment. The chemokines  
 CC include sequences AAB15785-B15794, AAB15803-B15813 and AAB15811-B15848.  
 CC These chemokine derivatives can be used to treat diseases such as  
 CC autoimmune diseases, atherosclerosis, osteoporosis, HIV infection and  
 CC AIDS, psoriasis, inflammatory diseases, hypertension, basophil-mediated  
 CC diseases, endotoxaemia, myocardial infarction, acute ischaemia and

CC rheumatoid arthritis, and can be used to prevent strokes and as  
 CC contraceptives. The coding sequences for the chemokines can be used in  
 CC gene therapy for the same diseases, as well as in the production of  
 CC animal models  
 XX  
 SQ Sequence 10 AA;

Query Match 67.5%; Score 52; DB 3; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 0.38;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 RGPGRAFVTI 13  
 |||||  
 Db 1 RGPGRAFVTI 10

RESULT 246  
 AAB92350  
 ID AAB92350 standard; peptide; 10 AA.

AC AAB92350;

DT 22-JUN-2001 (first entry)

DE Virus related peptide SEQ ID NO:1526.

KW Protection; endogenous therapeutic peptide; peptidase; conjugation;  
 KW blood component; modification; succinimidy; maleimido group; amino;  
 KW hydroxyl; thiol; hormone; growth factor; neurotransmitter.

OS Homo sapiens.  
 OS Synthetic.  
 PN WO200069900-A2.

XX 23-NOV-2000.

XX 17-MAY-2000; 2000WO-US013576.

PR 17-MAY-1999; 99US-0134406P.

PR 10-SEP-1999; 99US-0153406P.

PR 15-OCT-1999; 99US-0159783P.

XX (CONJ-) CONJUCHEM INC.

XX Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibadeau K;  
 DR WPI; 2001-112059/12.

PT Modifying and attaching therapeutic peptides to albumin prevents  
 PT peptidase degradation, useful for increasing length of in vivo activity.

PS Disclosure; Page 704; 733pp; English.

XX The present invention describes a modified therapeutic peptide (I)  
 CC comprising a therapeutically active amino acid region (III) and a  
 CC reactive group (II) (e.g. succinimidy and maleimido groups) attached to  
 CC a less therapeutically active amino acid region (IV), which covalently  
 CC bonds with amino/hydroxyl/thiol groups on blood components to form a  
 CC peptidase stabilised therapeutic peptide composed of 3-50 amino acids.  
 CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth  
 CC factors and neurotransmitters, to protect them from peptidase activity in  
 CC vivo for the treatment of various disorders. Endogenous therapeutic  
 CC peptides are not suitable as drug candidates as they require frequent  
 CC administration due to rapid degradation by peptidases in the body.  
 CC Modifying and attaching therapeutic peptides to albumin prevents or  
 CC reduces the action of peptidases to increase length of activity (half  
 CC life) and specificity as bonding to large molecules decreases  
 CC intracellular uptake and interference with physiological processes.  
 CC AAB90829 to AAB92441 represent peptides which can be used in the  
 CC exemplification of the present invention

XX Sequence 10 AA;  
 SQ



```
Query Match      67.5%; Score 52; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 4 RGPGRFVTI 13
DB 1 RGPGRFVTI 10

RESULT 247
AAB49397
ID AAB49397 standard; peptide; 10 AA.
XX
AC AAB49397;
XX
DT 06-MAR-2001 (first entry)
XX
DE HIV peptide SEQ ID NO: 12.
XX
KW HIV; immunogenic peptide; immune response; monophosphoryl lipid A;
KW antigen; infection; cancer; amyloid deposition.
XX
OS Human immunodeficiency virus.
XX
PN WO200069456-A2.
XX
PD 23-NOV-2000.
XX
PF 12-MAY-2000; 2000WO-US013156.
XX
PR 13-MAY-1999; 99US-0133963P.
XX
PA (AMCY ) AMERICAN CYANAMID CO.
XX
PI Hagen M;
XX
DR WPI; 2001-024946/03.
XX
PT Antigenic composition having an antigen (e.g. viral protein) and an
PT adjuvant, useful for enhancing humoral and cellular immune response in a
PT host or as a prophylaxis against virus, bacterium, parasite, cancer cell
PT or allergen.
XX
PS Example 1; Page 41; 129pp; English.
XX
CC The present invention provides an antigenic composition comprising an
CC antigen with a 3-O-deacylated monophosphoryl lipid A or monophosphoryl
CC lipid A adjuvant. The presence of the adjuvant causes an increased immune
CC response. The antigen may be from a pathogenic bacterium, fungus, virus
CC or parasite, a cancer cell, an allergen or from amyloid peptide protein.
CC The composition can be used in the prevention and treatment of infection,
CC cancer and diseases caused by amyloid deposition. It is particularly
CC useful against HIV, Neisseria gonorrhoeae and respiratory syncytial virus
XX
SQ Sequence 10 AA;

Query Match      67.5%; Score 52; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 4 RGPGRFVTI 13
DB 1 RGPGRFVTI 10

RESULT 248
AAE04801
ID AAE04801 standard; peptide; 10 AA.
XX
AC AAE04801;
XX
DT 10-SEP-2001 (first entry)
XX
```

```
XX
DE Human immunodeficiency virus env protein derived restricted CTL epitope.
XX
KW Human immunodeficiency virus; HIV; immunogen; anti-HIV; vaccine;
KW gene therapy; fusion protein; modified vaccinia virus Ankara vector; MVA;
KW cytotoxic T-lymphocyte; CTL; epitope.
XX
OS Human immunodeficiency virus.
XX
PN WO200147955-A2.
XX
PD 05-JUL-2001.
XX
PF 22-DEC-2000; 2000WO-GB004984.
XX
PR 23-DEC-1999; 99GB-00030294.
XX
PR 14-OCT-2000; 2000GB-00025234.
XX
PA (MEDI-) MEDICAL RES COUNCIL.
PA (ITAL-) INT AIDS VACCINE INITIATIVE.
PA (UTNA-) UNIV NAIROBI.
XX
PI Hanke T, McMichael AJ;
XX
DR WPI; 2001-418221/44.
XX
PT Novel immunogen for stimulating anti-HIV immune response, has a portion
PT of gag protein of HIV from HIV clade, parts of p17, p24 and synthetic
PT polypeptide comprising human cytotoxic T-lymphocyte epitopes of HIV
PT protein.
XX
PS Example 1; Page 8; 65pp; English.
XX
CC The invention relates to human immunodeficiency virus immunogens and
CC their corresponding DNA molecules. An immunogen comprises a portion of
CC gag protein of HIV from an HIV clade, parts of p17 and p24, modified to
CC prevent N-terminal myristoylation; and a synthetic polypeptide comprising
CC human cytotoxic T-lymphocyte (CTL) epitopes of HIV protein. This
CC immunogen is designed to elicit an HIV-specific immune response in
CC humans. The immunogen is useful in the preparation of a medicament such
CC as vaccine to prevent or treat HIV infection in a human subject. The
CC invention also relates to method of stimulating anti-HIV immune response
CC in a human subject which comprises administering one or more times an
CC amount of nucleic acid molecule sufficient to prime an immune response to
CC the immunogen, or else may be packaged within a delivery means, such as a
CC modified vaccinia virus Ankara (MVA) to boost the immune response to
CC common portion of the immunogens. The present sequence is human
CC immunodeficiency virus env protein derived restricted CTL epitope related
CC to the invention. This restricted CTL epitope is presented by a murine
CC MHC class I used for the mouse potency assay
XX
SQ Sequence 10 AA;

Query Match      67.5%; Score 52; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 4 RGPGRFVTI 13
DB 1 RGPGRFVTI 10

RESULT 249
AAE20153
ID AAE20153 standard; peptide; 10 AA.
XX
AC AAE20153;
XX
DT 29-AUG-2003 (revised)
DT 18-JUN-2002 (first entry)
XX
DE Human immunodeficiency virus type 1 (HIV-1) R101 peptide.
XX
```

KW Human immunodeficiency virus type 1; HIV-1; adjuvant; immunomodulator;  
 KW alpha-2-macroglobulin; 3-O-deacylated monophosphoryl lipid; MPL; GM-CSF;  
 KW granulocyte macrophage colony stimulating factor; immune response;  
 KW vaccine; R101 peptide.  
 XX  
 OS Human immunodeficiency virus 1.  
 PN WO200215930-A1.  
 XX  
 XX 28-FEB-2002.  
 XX  
 XX 27-AUG-2001; 2001WO-US026589.  
 PF  
 XX 25-AUG-2000; 2000US-0227624P.  
 PR  
 XX (UYDU-) UNIV DUKE.  
 XX  
 XX Haynes BF, Liao H, Patel DD;  
 PI WPI; 2002-269315/31.  
 XX  
 XX Use of 2-macroglobulin (2Masterisk), 3-O-deacylated monophosphoryl lipid  
 PT A (MPL) and granulocyte macrophage colony stimulating factor (GM-CSF) for  
 PT eliciting an immune response.  
 PT  
 XX Example 2; Page 21; 53pp; English.  
 PS  
 XX The invention relates to a composition comprising activated alpha-2-  
 CC macroglobulin (alpha 2M asterisk), 3-O-deacylated monophosphoryl lipid A  
 CC (MPL) and granulocyte macrophage colony stimulating factor (GM-CSF). The  
 CC invention also relates to an adjuvant suitable for use in multivalent HIV  
 CC immunogenic compositions. The compositions is useful for eliciting an  
 CC immune response. The present sequence is human immunodeficiency virus  
 CC type 1 (HIV-1) R101 peptide used in the exemplification of the invention.  
 CC (Updated on 29-AUG-2003 to standardise OS field)  
 XX  
 XX Sequence 10 AA;  
 SQ  
 Query Match 67.5%; Score 52; DB 5; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 0.38;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4 RGPGRFVVTI 13  
 Db 1 RGPGRFVVTI 10  
 RESULT 250  
 ABG31255  
 ID ABG31255 standard; peptide; 10 AA.  
 XX  
 AC ABG31255;  
 XX  
 XX 29-AUG-2003 (revised)  
 DT 21-OCT-2002 (first entry)  
 XX  
 DE GP120 classI restricted peptide.  
 XX  
 KW HSV; herpes; anti-HIV; cytostatic; immunomodulator; antibacterial;  
 KW antiparasitic; cancer; lymphocytic leukaemia; lymphoma; glioblastoma;  
 KW lung cancer; infectious disease; HIV; human immunodeficiency virus;  
 KW human papilloma; influenza; bacteria; parasite; vaccine; tumour cells;  
 KW gp120.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 XX WO200256828-A2.  
 PN  
 XX 25-JUL-2002.  
 PD  
 XX 29-NOV-2001; 2001WO-US047808.  
 PF  
 XX 29-NOV-2000; 2000US-0253859P.  
 PR

PR 30-NOV-2000; 2000US-0250079P.  
 XX (UYRP ) UNIV ROCHESTER.  
 XX  
 PI Federoff HJ, Bowers WJ, Frelinger JG, Willis RA, Evans TG;  
 PI Dewhurst S, Hocknell PK;  
 XX WPI; 2002-590693/63.  
 XX  
 XX Generating a herpesvirus amplicon particle for treating patients with  
 PT cancer or infectious disease, comprises transfecting a cell with an  
 PT amplicon vector, amplicon plasmid or nucleic acid sequence encoding an  
 PT accessory protein.  
 XX  
 XX Example 8; Page 21; 68pp; English.  
 PS  
 XX This invention relates to a method for generating a herpesvirus amplicon  
 CC particle comprising transfecting a cell with a Herpes simplex virus (HSV)  
 CC amplicon vector, an amplicon plasmid or a nucleic acid sequence that  
 CC encodes an accessory protein. The method of the invention may have anti-  
 CC HIV; cytostatic; immunomodulator; antibacterial; and antiparasitic  
 CC activity. The method of the invention is useful in generating herpesvirus  
 CC amplicon particles for treating patients with cancer (e.g. chronic  
 CC lymphocytic leukaemia, lymphoma, glioblastoma or lung cancer) or an  
 CC infectious disease such as HIV or those caused by human papilloma virus,  
 CC influenza virus, bacteria or parasite. The HSV amplicon particles or the  
 CC vectors can also be useful as vaccines. Gene therapy vectors based on the  
 CC herpes simplex virus exhibit a broad cellular tropism, they have the  
 CC capacity to package large amounts of genetic material (which makes them  
 CC useful in expressing multiple genes or gene sequences), they have a high  
 CC transduction efficiency, and they are maintained episomally, which makes  
 CC them less prone to insertional mutagenesis. In addition to infecting many  
 CC different types of cells, HSV vectors can also transduce non-replicating  
 CC or slowly-replicating cells. The method can also be carried out fairly  
 CC quickly. As a result, cells (such as tumour cells) can be removed from a  
 CC patient, treated, and readministered to the patient in the course of a  
 CC single operative procedure. The present sequence represents a herpes  
 CC simplex virus (HSV) gp120 peptide used to induce an immune response in  
 CC the method of the invention. (Updated on 29-AUG-2003 to standardise OS  
 CC field)  
 XX  
 XX Sequence 10 AA;  
 SQ  
 Query Match 67.5%; Score 52; DB 5; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 0.38;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4 RGPGRFVVTI 13  
 Db 1 RGPGRFVVTI 10  
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 Job time : 171 secs

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: May 16, 2005, 07:58:01 ; Search time 131 Seconds  
(without alignments)  
20.400 Million cell updates/sec

Title: SEQ1

Perfect score: 39

Sequence: 1 rafvtgk 8

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1432185 seqs, 334051727 residues

Total number of hits satisfying chosen parameters: 325800

Minimum DB seq length: 0

Maximum DB seq length: 25

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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- 11: /cgn2\_6/ptodata/1/pubpaa/US09C\_PUBCOMB.pep.\*
- 12: /cgn2\_6/ptodata/1/pubpaa/US09\_NEW\_PUB.pep.\*
- 13: /cgn2\_6/ptodata/1/pubpaa/US10A\_PUBCOMB.pep.\*
- 14: /cgn2\_6/ptodata/1/pubpaa/US10B\_PUBCOMB.pep.\*
- 15: /cgn2\_6/ptodata/1/pubpaa/US10C\_PUBCOMB.pep.\*
- 16: /cgn2\_6/ptodata/1/pubpaa/US10D\_PUBCOMB.pep.\*
- 17: /cgn2\_6/ptodata/1/pubpaa/US10\_NEW\_PUB.pep.\*
- 18: /cgn2\_6/ptodata/1/pubpaa/US11\_NEW\_PUB.pep.\*
- 19: /cgn2\_6/ptodata/1/pubpaa/US60\_NEW\_PUB.pep.\*
- 20: /cgn2\_6/ptodata/1/pubpaa/US60\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description       |
|------------|-------|-------------|--------|----|-------------------|
| 1          | 39    | 100.0       | 9      | 14 | US-10-079-167-52  |
| 2          | 39    | 100.0       | 9      | 14 | US-10-360-836-49  |
| 3          | 39    | 100.0       | 9      | 15 | US-10-367-580-115 |
| 4          | 39    | 100.0       | 9      | 15 | US-10-367-593-115 |
| 5          | 39    | 100.0       | 9      | 15 | US-10-367-594-115 |
| 6          | 39    | 100.0       | 9      | 15 | US-10-367-654-115 |
| 7          | 39    | 100.0       | 9      | 15 | US-10-367-658-115 |
| 8          | 39    | 100.0       | 9      | 15 | US-10-367-668-115 |
| 9          | 39    | 100.0       | 9      | 16 | US-10-367-674-115 |
| 10         | 39    | 100.0       | 9      | 16 | US-10-653-624-52  |
| 11         | 39    | 100.0       | 9      | 16 | US-10-833-439-52  |
| 12         | 39    | 100.0       | 9      | 16 | US-10-833-745-52  |
| 13         | 39    | 100.0       | 9      | 16 | US-10-833-744-52  |

|    |    |       |    |    |                    |                   |
|----|----|-------|----|----|--------------------|-------------------|
| 14 | 39 | 100.0 | 13 | 14 | US-10-239-313A-536 | Sequence 536, App |
| 15 | 39 | 100.0 | 15 | 9  | US-09-810-310-15   | Sequence 15, Appl |
| 16 | 39 | 100.0 | 15 | 9  | US-09-810-310-24   | Sequence 24, Appl |
| 17 | 39 | 100.0 | 15 | 9  | US-09-989-621-8    | Sequence 8, Appl  |
| 18 | 39 | 100.0 | 15 | 10 | US-09-827-688-9    | Sequence 9, Appl  |
| 19 | 39 | 100.0 | 15 | 10 | US-09-077-439A-3   | Sequence 3, Appl  |
| 20 | 39 | 100.0 | 15 | 14 | US-10-133-210-246  | Sequence 246, App |
| 21 | 39 | 100.0 | 15 | 14 | US-10-133-210-262  | Sequence 262, App |
| 22 | 39 | 100.0 | 15 | 14 | US-10-147-910-6    | Sequence 6, Appl  |
| 23 | 39 | 100.0 | 15 | 14 | US-10-239-313A-186 | Sequence 186, App |
| 24 | 39 | 100.0 | 15 | 17 | US-10-787-880-2    | Sequence 2, Appl  |
| 25 | 39 | 100.0 | 16 | 14 | US-10-062-710-44   | Sequence 44, Appl |
| 26 | 39 | 100.0 | 18 | 14 | US-10-062-710-45   | Sequence 45, Appl |
| 27 | 39 | 100.0 | 20 | 9  | US-09-813-659-3    | Sequence 3, Appl  |
| 28 | 39 | 100.0 | 20 | 15 | US-10-283-610A-3   | Sequence 3, Appl  |
| 29 | 39 | 100.0 | 21 | 14 | US-10-178-488-25   | Sequence 25, Appl |
| 30 | 39 | 100.0 | 24 | 17 | US-10-621-675-160  | Sequence 160, App |
| 31 | 37 | 94.9  | 9  | 16 | US-10-777-051-131  | Sequence 131, App |
| 32 | 35 | 89.7  | 20 | 14 | US-10-311-111-1    | Sequence 1, Appl  |
| 33 | 35 | 89.7  | 20 | 16 | US-10-398-932-1    | Sequence 1, Appl  |
| 34 | 34 | 87.2  | 12 | 14 | US-10-239-313A-535 | Sequence 535, App |
| 35 | 30 | 76.9  | 7  | 14 | US-10-311-111-4    | Sequence 4, Appl  |
| 36 | 30 | 76.9  | 7  | 16 | US-10-398-932-4    | Sequence 4, Appl  |
| 37 | 28 | 71.8  | 9  | 9  | US-09-825-886-30   | Sequence 30, Appl |
| 38 | 28 | 71.8  | 9  | 10 | US-09-997-848A-17  | Sequence 17, Appl |
| 39 | 28 | 71.8  | 9  | 10 | US-09-997-848A-18  | Sequence 18, Appl |
| 40 | 28 | 71.8  | 9  | 16 | US-10-777-053-139  | Sequence 139, App |
| 41 | 28 | 71.8  | 9  | 17 | US-10-494-161-17   | Sequence 17, Appl |
| 42 | 28 | 71.8  | 10 | 9  | US-09-858-349-3    | Sequence 3, Appl  |
| 43 | 28 | 71.8  | 10 | 9  | US-09-810-310-16   | Sequence 16, Appl |
| 44 | 28 | 71.8  | 10 | 9  | US-09-820-484-8    | Sequence 8, Appl  |
| 45 | 28 | 71.8  | 10 | 9  | US-09-087-513-7    | Sequence 7, Appl  |

#### ALIGNMENTS

RESULT 1  
US-10-079-167-52  
; Sequence 52, Application US/10079167  
; Publication No. US20030138454A1  
; GENERAL INFORMATION:  
; APPLICANT: Hill, Adrian V.S.  
; APPLICANT: McShane, Helen  
; APPLICANT: Gilbert, Sarah C.  
; APPLICANT: Reece, William  
; APPLICANT: Schneider, Joerg  
; TITLE OF INVENTION: Vaccination Method  
; FILE REFERENCE: 2907.1000-001  
; CURRENT APPLICATION NUMBER: US/10/079,167  
; CURRENT FILING DATE: 2002-02-19  
; PRIOR APPLICATION NUMBER: US 09/454,204  
; PRIOR FILING DATE: 1999-12-09  
; PRIOR APPLICATION NUMBER: PCT/GB98/01681  
; PRIOR FILING DATE: 1998-06-09  
; PRIOR APPLICATION NUMBER: GB 97 11957.2  
; PRIOR FILING DATE: 1997-06-09  
; PRIOR APPLICATION NUMBER: PCT/GB01/04116  
; PRIOR FILING DATE: 2001-09-13  
; PRIOR APPLICATION NUMBER: GB 00 23203.3  
; PRIOR FILING DATE: 2001-09-21  
; NUMBER OF SEQ ID NOS: 99  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 52  
; LENGTH: 9  
; TYPE: PRT  
; ORGANISM: Unknown  
; FEATURE:  
; OTHER INFORMATION: CTL Epitope of HIV-1 gp120  
US-10-079-167-52

Query Match 100.0%; Score 39; DB 14; Length 9;  
Best Local Similarity 100.0%; Pred. No. 1.3e+06;

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Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8
   |||||
Db 2 RAFVTIGK 9

RESULT 2
US-10-360-836-49
; Sequence 49, Application US/10360836
; Publication No. US20030185854A1
; GENERAL INFORMATION:
; APPLICANT: Zavala, Fidel
; TITLE OF INVENTION: USE OF RECOMBINANT HEPATITIS B CORE
; TITLE OF INVENTION: PARTICLES TO DEVELOP VACCINES AGAINST INFECTIOUS PATHOGENS
; TITLE OF INVENTION: AND MALIGNANCIES
; FILE REFERENCE: 5986/1J876
; CURRENT APPLICATION NUMBER: US/10/360,836
; CURRENT FILING DATE: 2003-02-07
; PRIOR APPLICATION NUMBER: 60/354,963
; PRIOR FILING DATE: 2002-02-08
; NUMBER OF SEQ ID NOS: 86
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 49
; LENGTH: 9
; TYPE: PRT
; ORGANISM: human immunodeficiency virus (HIV-1)
US-10-360-836-49

Query Match 100.0%; Score 39; DB 14; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTICK 8
   |||||
Db 2 RAFVTIGK 9

RESULT 3
US-10-367-580-115
; Sequence 115, Application US/10367580
; Publication No. US20040071720A1
; GENERAL INFORMATION:
; APPLICANT: Rothman, James E.
; APPLICANT: Hartl, F. Ulrich
; APPLICANT: Hoe, Mee H.
; APPLICANT: Houghton, Alan
; APPLICANT: Takechi, Yoshizumi
; APPLICANT: Mayhew, Mark
; TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies
; FILE REFERENCE: 11746/461061
; CURRENT APPLICATION NUMBER: US/10/367,580
; CURRENT FILING DATE: 2003-02-14
; PRIOR APPLICATION NUMBER: US 09/794,832
; PRIOR FILING DATE: 2001-02-27
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: PCT/US96/13363
; PRIOR FILING DATE: 1996-08-16
; PRIOR APPLICATION NUMBER: US 60/002,490
; PRIOR FILING DATE: 1995-08-18
; PRIOR APPLICATION NUMBER: US 60/002,479
; NUMBER OF SEQ ID NOS: 349
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 115
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic peptide
US-10-367-580-115

Query Match 100.0%; Score 39; DB 14; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTICK 8
   |||||
Db 2 RAFVTIGK 9

RESULT 4
US-10-367-593-115
; Sequence 115, Application US/10367593
; Publication No. US20040071721A1
; GENERAL INFORMATION:
; APPLICANT: Rothman, James E.
; APPLICANT: Hartl, F. Ulrich
; APPLICANT: Hoe, Mee H.
; APPLICANT: Houghton, Alan
; APPLICANT: Takechi, Yoshizumi
; APPLICANT: Mayhew, Mark
; TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies
; FILE REFERENCE: 11746/461012
; CURRENT APPLICATION NUMBER: US/10/367,593
; CURRENT FILING DATE: 2003-02-14
; PRIOR APPLICATION NUMBER: US 09/011,645
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: PCT/US96/13363
; PRIOR FILING DATE: 1996-08-16
; PRIOR APPLICATION NUMBER: US 60/002,490
; PRIOR FILING DATE: 1995-08-18
; PRIOR APPLICATION NUMBER: US 60/002,479
; PRIOR FILING DATE: 1995-08-18
; NUMBER OF SEQ ID NOS: 349
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 115
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic peptide
US-10-367-593-115

Query Match 100.0%; Score 39; DB 15; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8
   |||||
Db 2 RAFVTIGK 9

RESULT 5
US-10-367-594-115
; Sequence 115, Application US/10367594
; Publication No. US20040071722A1
; GENERAL INFORMATION:
; APPLICANT: Rothman, James E.
; APPLICANT: Hartl, F. Ulrich
; APPLICANT: Hoe, Mee H.
; APPLICANT: Houghton, Alan
; APPLICANT: Takechi, Yoshizumi
; APPLICANT: Mayhew, Mark
; TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies
; FILE REFERENCE: 11746/461041
; CURRENT APPLICATION NUMBER: US/10/367,594
; CURRENT FILING DATE: 2003-02-14
; PRIOR APPLICATION NUMBER: US 09/680,806
; PRIOR FILING DATE: 2000-10-05
; PRIOR APPLICATION NUMBER: US 09/011,645
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: PCT/US96/13363
; PRIOR FILING DATE: 1996-08-16
```

```
Query Match 100.0%; Score 39; DB 15; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8
   |||||
Db 2 RAFVTIGK 9

RESULT 4
US-10-367-593-115
; Sequence 115, Application US/10367593
; Publication No. US20040071721A1
; GENERAL INFORMATION:
; APPLICANT: Rothman, James E.
; APPLICANT: Hartl, F. Ulrich
; APPLICANT: Hoe, Mee H.
; APPLICANT: Houghton, Alan
; APPLICANT: Takechi, Yoshizumi
; APPLICANT: Mayhew, Mark
; TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies
; FILE REFERENCE: 11746/461012
; CURRENT APPLICATION NUMBER: US/10/367,593
; CURRENT FILING DATE: 2003-02-14
; PRIOR APPLICATION NUMBER: US 09/011,645
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: PCT/US96/13363
; PRIOR FILING DATE: 1996-08-16
; PRIOR APPLICATION NUMBER: US 60/002,490
; PRIOR FILING DATE: 1995-08-18
; PRIOR APPLICATION NUMBER: US 60/002,479
; PRIOR FILING DATE: 1995-08-18
; NUMBER OF SEQ ID NOS: 349
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 115
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic peptide
US-10-367-593-115

Query Match 100.0%; Score 39; DB 15; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8
   |||||
Db 2 RAFVTIGK 9

RESULT 5
US-10-367-594-115
; Sequence 115, Application US/10367594
; Publication No. US20040071722A1
; GENERAL INFORMATION:
; APPLICANT: Rothman, James E.
; APPLICANT: Hartl, F. Ulrich
; APPLICANT: Hoe, Mee H.
; APPLICANT: Houghton, Alan
; APPLICANT: Takechi, Yoshizumi
; APPLICANT: Mayhew, Mark
; TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies
; FILE REFERENCE: 11746/461041
; CURRENT APPLICATION NUMBER: US/10/367,594
; CURRENT FILING DATE: 2003-02-14
; PRIOR APPLICATION NUMBER: US 09/680,806
; PRIOR FILING DATE: 2000-10-05
; PRIOR APPLICATION NUMBER: US 09/011,645
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: PCT/US96/13363
; PRIOR FILING DATE: 1996-08-16
```

```

; PRIOR APPLICATION NUMBER: US 60/002,490
; PRIOR FILING DATE: 1995-08-18
; PRIOR APPLICATION NUMBER: US 60/002,479
; PRIOR FILING DATE: 1995-08-18
; NUMBER OF SEQ ID NOS: 349
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 115
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic peptide
US-10-367-654-115

```

```

Query Match      100.0%; Score 39; DB 15; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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```

Qy 1 RAFVTICK 8
   |||||
Db 2 RAFVTICK 9

```

```

RESULT 6
US-10-367-654-115
; Sequence 115, Application US/10367654
; Publication No. US20040071723A1
; GENERAL INFORMATION:
; APPLICANT: Rothman, James E.
; APPLICANT: Hartl, F. Ulrich
; APPLICANT: Hoe, Mee H.
; APPLICANT: Houghton, Alan
; APPLICANT: Takechi, Yoshizumi
; APPLICANT: Mayhew, Mark
; TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies
; FILE REFERENCE: 11746/461032
; CURRENT APPLICATION NUMBER: US/10/367,654
; CURRENT FILING DATE: 2003-02-14
; PRIOR FILING DATE: US 10/171,734
; PRIOR FILING DATE: 2002-06-13
; PRIOR APPLICATION NUMBER: US 09/636,295
; PRIOR FILING DATE: 2000-08-10
; PRIOR APPLICATION NUMBER: US 09/011,645
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: PCT/US96/13363
; PRIOR FILING DATE: 1996-08-16
; PRIOR APPLICATION NUMBER: US 60/002,490
; PRIOR FILING DATE: 1995-08-18
; PRIOR APPLICATION NUMBER: US 60/002,479
; NUMBER OF SEQ ID NOS: 349
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 115
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic peptide
US-10-367-654-115

```

```

Query Match      100.0%; Score 39; DB 15; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 1 RAFVTICK 8
   |||||
Db 2 RAFVTICK 9

```

```

RESULT 7
US-10-367-658-115
; Sequence 115, Application US/10367658
; Publication No. US20040071724A1

```

```

; GENERAL INFORMATION:
; APPLICANT: Rothman, James E.
; APPLICANT: Hartl, F. Ulrich
; APPLICANT: Hoe, Mee H.
; APPLICANT: Houghton, Alan
; APPLICANT: Takechi, Yoshizumi
; APPLICANT: Mayhew, Mark
; TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies
; FILE REFERENCE: 11746/461051
; CURRENT APPLICATION NUMBER: US/10/367,658
; CURRENT FILING DATE: 2003-02-14
; PRIOR FILING DATE: US 09/794,529
; PRIOR APPLICATION NUMBER: US 09/011,645
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: PCT/US96/13363
; PRIOR FILING DATE: 1996-08-16
; PRIOR APPLICATION NUMBER: US 60/002,490
; PRIOR FILING DATE: 1995-08-18
; PRIOR APPLICATION NUMBER: US 60/002,479
; NUMBER OF SEQ ID NOS: 349
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 115
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic peptide
US-10-367-658-115

```

```

Query Match      100.0%; Score 39; DB 15; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 1 RAFVTICK 8
   |||||
Db 2 RAFVTICK 9

```

```

RESULT 8
US-10-367-668-115
; Sequence 115, Application US/10367668
; Publication No. US20040071725A1
; GENERAL INFORMATION:
; APPLICANT: Rothman, James E.
; APPLICANT: Hartl, F. Ulrich
; APPLICANT: Hoe, Mee H.
; APPLICANT: Houghton, Alan
; APPLICANT: Takechi, Yoshizumi
; APPLICANT: Mayhew, Mark
; TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies
; FILE REFERENCE: 11746/461072
; CURRENT APPLICATION NUMBER: US/10/367,668
; CURRENT FILING DATE: 2003-02-14
; PRIOR FILING DATE: US 09/794,517
; PRIOR APPLICATION NUMBER: US 09/011,645
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: PCT/US96/13363
; PRIOR FILING DATE: 1996-08-16
; PRIOR APPLICATION NUMBER: US 60/002,490
; PRIOR FILING DATE: 1995-08-18
; PRIOR APPLICATION NUMBER: US 60/002,479
; PRIOR FILING DATE: 1995-08-18
; NUMBER OF SEQ ID NOS: 349
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 115
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic peptide

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US-10-367-668-115

Query Match 100.0%; Score 39; DB 15; Length 9;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
 |||||  
 Db 2 RAFVTIGK 9

RESULT 9

US-10-367-674-115  
 ; Sequence 115, Application US/10367674  
 ; Publication No. US20040127684A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Rothman, James E.  
 ; APPLICANT: Hartl, F. Ulrich  
 ; APPLICANT: Hoe, Mee H.  
 ; APPLICANT: Houghton, Alan  
 ; APPLICANT: Takechi, Yoshizumi  
 ; APPLICANT: Mayhew, Mark  
 ; TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies  
 ; FILE REFERENCE: 11746/4610211  
 ; CURRENT APPLICATION NUMBER: US/10/367,674  
 ; CURRENT FILING DATE: 2003-02-14  
 ; PRIOR FILING DATE: 2002-06-13  
 ; PRIOR APPLICATION NUMBER: US 10/170,738  
 ; PRIOR FILING DATE: 2002-06-13  
 ; PRIOR APPLICATION NUMBER: US 09/552,868  
 ; PRIOR FILING DATE: 2000-04-20  
 ; PRIOR APPLICATION NUMBER: US 09/011,645  
 ; PRIOR FILING DATE: 1998-02-13  
 ; PRIOR APPLICATION NUMBER: PCT/US96/13363  
 ; PRIOR FILING DATE: 1996-08-16  
 ; PRIOR APPLICATION NUMBER: US 60/002,490  
 ; PRIOR FILING DATE: 1995-08-18  
 ; PRIOR APPLICATION NUMBER: US 60/002,479  
 ; PRIOR FILING DATE: 1995-08-18  
 ; NUMBER OF SEQ ID NOS: 349  
 ; SOFTWARE: WordPerfect 8.0 for Windows  
 ; SEQ ID NO 115  
 ; LENGTH: 9  
 ; TYPE: PRT  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: synthetic peptide

Query Match 100.0%; Score 39; DB 16; Length 9;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
 |||||  
 Db 2 RAFVTIGK 9

RESULT 10

US-10-653-624-52  
 ; Sequence 52, Application US/10653624  
 ; Publication No. US20040131594A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: McMichael, Andrew  
 ; APPLICANT: Hill, Adrian V.S.  
 ; APPLICANT: Gilbert, Sarah C.  
 ; APPLICANT: Schneider, Jorg  
 ; APPLICANT: Plebanski, Magdalena  
 ; APPLICANT: Hanke, Tomas  
 ; APPLICANT: Smith, Geoffrey L.  
 ; TITLE OF INVENTION: Methods and Reagents for Vaccination  
 ; FILE REFERENCE: 2907.1000-000

; CURRENT APPLICATION NUMBER: US/10/653,624  
 ; CURRENT FILING DATE: 2003-09-02  
 ; PRIOR FILING DATE: US/09/454,204A  
 ; PRIOR FILING DATE: 1999-12-09  
 ; PRIOR APPLICATION NUMBER: PCT/GB98/01681  
 ; PRIOR FILING DATE: 1998-06-09  
 ; PRIOR APPLICATION NUMBER: GB 97 11957.2  
 ; PRIOR FILING DATE: 1997-06-09  
 ; NUMBER OF SEQ ID NOS: 78  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 52  
 ; LENGTH: 9  
 ; TYPE: PRT  
 ; ORGANISM: Unknown  
 ; FEATURE:  
 ; OTHER INFORMATION: CTL Epitope of HIV-1 gp120  
 ; US-10-653-624-52

Query Match 100.0%; Score 39; DB 16; Length 9;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
 |||||  
 Db 2 RAFVTIGK 9

RESULT 11

US-10-833-439-52  
 ; Sequence 52, Application US/10833439  
 ; Publication No. US20040175365A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: McMichael, Andrew  
 ; APPLICANT: Hill, Adrian V.S.  
 ; APPLICANT: Gilbert, Sarah C.  
 ; APPLICANT: Schneider, Jorg  
 ; APPLICANT: Plebanski, Magdalena  
 ; APPLICANT: Hanke, Tomas  
 ; APPLICANT: Smith, Geoffrey L.  
 ; APPLICANT: Blanchard, Tom  
 ; TITLE OF INVENTION: Methods and Reagents for Vaccination  
 ; FILE REFERENCE: 2907.1000-000  
 ; CURRENT APPLICATION NUMBER: US/10/833,439  
 ; CURRENT FILING DATE: 2004-04-28  
 ; PRIOR FILING DATE: US/10/686,943  
 ; PRIOR FILING DATE: 2003-10-16  
 ; PRIOR APPLICATION NUMBER: US/09/454,204  
 ; PRIOR FILING DATE: 1999-12-09  
 ; PRIOR APPLICATION NUMBER: PCT/GB98/01681  
 ; PRIOR FILING DATE: 1998-06-09  
 ; PRIOR APPLICATION NUMBER: GB 97 11957.2  
 ; PRIOR FILING DATE: 1997-06-09  
 ; NUMBER OF SEQ ID NOS: 78  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 52  
 ; LENGTH: 9  
 ; TYPE: PRT  
 ; ORGANISM: Unknown  
 ; FEATURE:  
 ; OTHER INFORMATION: CTL Epitope of HIV-1 gp120  
 ; US-10-833-439-52

Query Match 100.0%; Score 39; DB 16; Length 9;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
 |||||  
 Db 2 RAFVTIGK 9

RESULT 12

```
US-10-833-745-52
; Sequence 52, Application US/10833745
; Publication No. US20040191272A1
; GENERAL INFORMATION:
; APPLICANT: McMichael, Andrew
; APPLICANT: Hill, Adrian V.S.
; APPLICANT: Gilbert, Sarah C.
; APPLICANT: Schneider, Jorg
; APPLICANT: Plebanski, Magdalena
; APPLICANT: Hanke, Tomas
; APPLICANT: Smith, Geoffrey L.
; APPLICANT: Blanchard, Tom
; TITLE OF INVENTION: Methods and Reagents for Vaccination
; FILE REFERENCE: 2907.1000-000
; CURRENT APPLICATION NUMBER: US/10/833,745
; PRIOR FILING DATE: 2004-04-28
; PRIOR APPLICATION NUMBER: US/10/686,943
; PRIOR FILING DATE: 2003-10-16
; PRIOR APPLICATION NUMBER: US/09/454,204
; PRIOR FILING DATE: 1999-12-09
; PRIOR APPLICATION NUMBER: PCT/GB98/01681
; PRIOR FILING DATE: 1998-06-09
; PRIOR APPLICATION NUMBER: GB 97 11957.2
; PRIOR FILING DATE: 1997-06-09
; NUMBER OF SEQ ID NOS: 78
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 52
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: CTL Epitope of HIV-1 gp120
US-10-833-745-52
Query Match 100.0%; Score 39; DB 16; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 RAFVTICK 8
Db 2 RAFVTICK 9
RESULT 14
US-10-239-313A-536
; Sequence 536, Application US/10239313A
; Publication No. US20030175285A1
; GENERAL INFORMATION:
; APPLICANT: KLINGUER - HAMOUR, Christine
; APPLICANT: CORVAIA, Nathalie
; APPLICANT: BECK, Alain
; APPLICANT: GOETSCH, Liliane
; TITLE OF INVENTION: MOLECULE OF PHARMACEUTICAL INTEREST COMPRISING AT ITS
; TITLE OF INVENTION: N-TERMINAL A GLUTAMIC ACID OR A GLUTAMINE IN THE FORM
; TITLE OF INVENTION: OF A PHYSIOLOGICALLY ACCEPTABLE STRONG ACID
; FILE REFERENCE: 343 727 - US
; CURRENT APPLICATION NUMBER: US/10/239,313A
; CURRENT FILING DATE: 2002-09-19
; PRIOR APPLICATION NUMBER: FR 00/03711
; PRIOR FILING DATE: 2000-03-23
; PRIOR APPLICATION NUMBER: PCT 01/70772
; PRIOR FILING DATE: 2001-03-22
; NUMBER OF SEQ ID NOS: 697
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 536
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Human immunodeficiency virus
US-10-239-313A-536
Query Match 100.0%; Score 39; DB 14; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.092;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 RAFVTICK 8
Db 6 RAFVTICK 13
RESULT 15
US-09-810-310-15
; Sequence 15, Application US/09810310
; Patent No. US20020044948A1
; GENERAL INFORMATION:
; APPLICANT: Khleif, Samir N.
; APPLICANT: Berzofsky, Jay A.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR CO-STIMULATION OF
; TITLE OF INVENTION: IMMUNOLOGICAL RESPONSES TO PEPTIDE ANTIGENS
; FILE REFERENCE: 15280-415100US
; CURRENT APPLICATION NUMBER: US/09/810,310
; CURRENT FILING DATE: 2001-03-14
; PRIOR APPLICATION NUMBER: 60/189,396
; PRIOR FILING DATE: 2000-03-15
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
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OTHER INFORMATION: Description of Artificial Sequence: HIV PEPTIDE  
US-09-810-310-15  
GENERAL INFORMATION: ANTIGEN

Query Match 100.0%; Score 39; DB 9; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
Db 8 RAFVTIGK 15

## RESULT 16

US-09-810-310-24  
Sequence 24, Application US/09810310  
Publication No. US20020044948A1  
GENERAL INFORMATION:  
APPLICANT: Khleif, Samir N.  
APPLICANT: Bezofsky, Jay A.  
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR CO-STIMULATION OF  
TITLE OF INVENTION: IMMUNOLOGICAL RESPONSES TO PEPTIDE ANTIGENS  
FILE REFERENCE: 15280-415100US  
CURRENT APPLICATION NUMBER: US/09/810,310  
CURRENT FILING DATE: 2001-03-14  
PRIOR APPLICATION NUMBER: 60/189,396  
PRIOR FILING DATE: 2000-03-15  
NUMBER OF SEQ ID NOS: 61  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 24  
LENGTH: 15  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: HIV PEPTIDE  
OTHER INFORMATION: ANTIGEN  
US-09-810-310-24

Query Match 100.0%; Score 39; DB 9; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
Db 8 RAFVTIGK 15

## RESULT 17

US-09-989-621-8  
Sequence 8, Application US/09989621  
Patent No. US20020151683A1  
GENERAL INFORMATION:  
APPLICANT: Mogam Biotechnology Research Institute  
APPLICANT: Kim, Tae-Youn  
APPLICANT: Lee, Ki-Young  
APPLICANT: Chang, Jin-Soo  
APPLICANT: Cho, Sung-Yoo  
APPLICANT: Hwang, Yu-Kyeong  
APPLICANT: Choi, Myeong  
APPLICANT: Cheong, Hong-Seok  
TITLE OF INVENTION: Liposomes Comprising Peptide Antigens  
TITLE OF INVENTION: Derived from X Protein of Hepatitis B virus  
FILE REFERENCE: 0136/0E154  
CURRENT APPLICATION NUMBER: US/09/989,621  
CURRENT FILING DATE: 2001-11-20  
PRIOR APPLICATION NUMBER: 09/051,006  
PRIOR FILING DATE: 2000-11-17  
NUMBER OF SEQ ID NOS: 10  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 8  
LENGTH: 15  
TYPE: PRT  
ORGANISM: HIV

## US-09-989-621-8

Query Match 100.0%; Score 39; DB 9; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
Db 8 RAFVTIGK 15

## RESULT 18

US-09-827-688-9  
Sequence 9, Application US/09827688  
Publication No. US20030165476A1  
GENERAL INFORMATION:  
APPLICANT: ORSON, FRANK  
APPLICANT: KINSEY, BERNA  
APPLICANT: BHOGAL, BALBIR  
TITLE OF INVENTION: MACROAGGREGATED PROTEIN CONJUGATES AS ORAL GENETIC IMMUNIZATION DE  
TITLE OF INVENTION: AGENTS  
FILE REFERENCE: P01949US1/10004014  
CURRENT APPLICATION NUMBER: US/09/827,688  
CURRENT FILING DATE: 2001-04-06  
PRIOR APPLICATION NUMBER: 60/195,680  
PRIOR FILING DATE: 2000-04-07  
NUMBER OF SEQ ID NOS: 13  
SOFTWARE: PatentIn version 3.0  
SEQ ID NO 9  
LENGTH: 15  
TYPE: PRT  
ORGANISM: HIV p18  
US-09-827-688-9

Query Match 100.0%; Score 39; DB 10; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
Db 8 RAFVTIGK 15

## RESULT 19

US-09-077-439A-3  
Sequence 3, Application US/09077439A  
Publication No. US20030202989A1  
GENERAL INFORMATION:  
APPLICANT: Collier, R. John  
APPLICANT: Blanke, Steven R.  
APPLICANT: Milne, Jill C.  
APPLICANT: Benson, Ericka L.  
APPLICANT: Ballard, Jimmy D.  
APPLICANT: Starnbach, Michael N.  
TITLE OF INVENTION: Use of Toxin Peptides and/or Affinity  
TITLE OF INVENTION: Handles for Delivering Compounds into Cells  
FILE REFERENCE: 00246/187002  
CURRENT APPLICATION NUMBER: US/09/077,439A  
CURRENT FILING DATE: 1999-04-08  
PRIOR APPLICATION NUMBER: PCT/US96/20463  
PRIOR FILING DATE: 1996-12-13  
PRIOR APPLICATION NUMBER: US 60/019,275  
PRIOR FILING DATE: 1996-06-07  
PRIOR APPLICATION NUMBER: US 60/008,518  
PRIOR FILING DATE: 1995-12-13  
NUMBER OF SEQ ID NOS: 26  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 3  
LENGTH: 15  
TYPE: PRT  
ORGANISM: Homo sapien  
US-09-077-439A-3



Query Match 100.0%; Score 39; DB 10; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
| | | | |  
DB 8 RAFVTIGK 15

## RESULT 20

US-10-133-210-246  
; Sequence 246, Application US/10133210  
; Publication No. US20030103964A1  
; GENERAL INFORMATION:  
; APPLICANT: Delisi, Charles  
; APPLICANT: Berzofsky, Jay  
; APPLICANT: Gulukota, Kamalakar  
; APPLICANT: Vaccaro, Dennis  
; APPLICANT: Weng, Zhiping  
; APPLICANT: Zhang, Chao  
; TITLE OF INVENTION: METHODS FOR DESIGNING MOLECULAR CONJUGATES AND  
; FILE REFERENCE: BU-035AX  
; CURRENT APPLICATION NUMBER: US/10/133,210  
; CURRENT FILING DATE: 2002-04-26  
; NUMBER OF SEQ ID NOS: 281  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 246  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
US-10-133-210-246

Query Match 100.0%; Score 39; DB 14; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
| | | | |  
DB 8 RAFVTIGK 15

## RESULT 21

US-10-133-210-262  
; Sequence 262, Application US/10133210  
; Publication No. US20030103964A1  
; GENERAL INFORMATION:  
; APPLICANT: Delisi, Charles  
; APPLICANT: Berzofsky, Jay  
; APPLICANT: Gulukota, Kamalakar  
; APPLICANT: Vaccaro, Dennis  
; APPLICANT: Weng, Zhiping  
; APPLICANT: Zhang, Chao  
; TITLE OF INVENTION: METHODS FOR DESIGNING MOLECULAR CONJUGATES AND  
; FILE REFERENCE: BU-035AX  
; CURRENT APPLICATION NUMBER: US/10/133,210  
; CURRENT FILING DATE: 2002-04-26  
; NUMBER OF SEQ ID NOS: 281  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 262  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
US-10-133-210-262

Query Match 100.0%; Score 39; DB 14; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
| | | | |  
DB 8 RAFVTIGK 15

## RESULT 22

US-10-147-910-6  
; Sequence 6, Application US/10147910  
; Publication No. US20030124718A1  
; GENERAL INFORMATION:  
; APPLICANT: Fuller, Deborah  
; APPLICANT: Fuller, James  
; APPLICANT: Haynes, Joel  
; APPLICANT: Shipley, Timothy  
; TITLE OF INVENTION: Vaccine Composition  
; FILE REFERENCE: 033267-006  
; CURRENT APPLICATION NUMBER: US/10/147,910  
; CURRENT FILING DATE: 2002-05-20  
; PRIOR APPLICATION NUMBER: US 60/291,654  
; PRIOR FILING DATE: 2001-05-18  
; PRIOR APPLICATION NUMBER: US 60/291,655  
; PRIOR FILING DATE: 2001-05-18  
; NUMBER OF SEQ ID NOS: 53  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 6  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: HIV  
US-10-147-910-6

Query Match 100.0%; Score 39; DB 14; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
| | | | |  
DB 8 RAFVTIGK 15

## RESULT 23

US-10-239-313A-186  
; Sequence 186, Application US/10239313A  
; Publication No. US20030175285A1  
; GENERAL INFORMATION:  
; APPLICANT: KLINGUER - HAMOUR, Christine  
; APPLICANT: CORVAIA, Nathalie  
; APPLICANT: BECK, Alain  
; APPLICANT: GOETSCH, Lilliane  
; TITLE OF INVENTION: MOLECULE OF PHARMACEUTICAL INTEREST COMPRISING AT ITS  
; FILE REFERENCE: N-TERMINAL A GLUTAMIC ACID OR A GLUTAMINE IN THE FORM  
; TITLE OF INVENTION: OF A PHYSIOLOGICALLY ACCEPTABLE STRONG ACID  
; FILE REFERENCE: 343 727 - US  
; CURRENT APPLICATION NUMBER: US/10/239,313A  
; CURRENT FILING DATE: 2002-09-19  
; PRIOR APPLICATION NUMBER: FR 00/03711  
; PRIOR FILING DATE: 2000-03-23  
; PRIOR APPLICATION NUMBER: PCT 01/70772  
; PRIOR FILING DATE: 2001-03-22  
; NUMBER OF SEQ ID NOS: 697  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 186  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: Human immunodeficiency virus  
US-10-239-313A-186

Query Match 100.0%; Score 39; DB 14; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
| | | | |

```
Db          7 RAFVTIGK 14

RESULT 24
US-10-787-880-2
; Sequence 2, Application US/10787880
; Publication No. US20050025777A1
; GENERAL INFORMATION:
; APPLICANT: Pohlmann, Edward L.
; APPLICANT: Sheehy, Michael J.
; APPLICANT: Barton, Kenneth A.
; TITLE OF INVENTION: PARTICLE-MEDIATED DELIVERY OF ANTIGENS
; FILE REFERENCE: 033267-018
; CURRENT APPLICATION NUMBER: US/10/787,880
; CURRENT FILING DATE: 2004-02-27
; PRIOR APPLICATION NUMBER: US/09/191,772
; PRIOR FILING DATE: 1998-11-13
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 15
; TYPE: PRT
; ORGANISM: HIVgp120
US-10-787-880-2

Query Match      100.0%; Score 39; DB 17; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.11;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RAFVTIGK 8
Db      8 RAFVTIGK 15

RESULT 25
US-10-062-710-44
; Sequence 44, Application US/10062710
; Publication No. US20030049253A1
; GENERAL INFORMATION:
; APPLICANT: Li, Frank Q.
; APPLICANT: Chu, Yong-Liang
; APPLICANT: Qiu, Jian-Tai
; TITLE OF INVENTION: Polymeric Conjugates for Delivery of
; TITLE OF INVENTION: MHC-Recognized Epitopes
; TITLE OF INVENTION: Via Peptide Vaccines
; FILE REFERENCE: 3781-001-27
; CURRENT APPLICATION NUMBER: US/10/062,710
; CURRENT FILING DATE: 2002-02-05
; PRIOR APPLICATION NUMBER: US 60/310,498
; PRIOR FILING DATE: 2001-08-08
; NUMBER OF SEQ ID NOS: 232
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 44
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: HIV Helper-T Cell Epitopes
US-10-062-710-44

Query Match      100.0%; Score 39; DB 14; Length 16;
Best Local Similarity 100.0%; Pred. No. 0.11;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RAFVTIGK 8
Db      9 RAFVTIGK 16

RESULT 26
US-10-062-710-45
; Sequence 45, Application US/10062710
; Publication No. US20030049253A1
; GENERAL INFORMATION:
; APPLICANT: Li, Frank Q.
; APPLICANT: Chu, Yong-Liang
; APPLICANT: Qiu, Jian-Tai
; TITLE OF INVENTION: Polymeric Conjugates for Delivery of
; TITLE OF INVENTION: MHC-Recognized Epitopes
; TITLE OF INVENTION: Via Peptide Vaccines
; FILE REFERENCE: 3781-001-27
; CURRENT APPLICATION NUMBER: US/10/062,710
; CURRENT FILING DATE: 2002-02-05
; PRIOR APPLICATION NUMBER: US 60/310,498
; PRIOR FILING DATE: 2001-08-08
; NUMBER OF SEQ ID NOS: 232
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 45
; LENGTH: 18
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: HIV Helper-T Cell Epitopes
US-10-062-710-45

Query Match      100.0%; Score 39; DB 14; Length 18;
Best Local Similarity 100.0%; Pred. No. 0.13;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RAFVTIGK 8
Db      8 RAFVTIGK 15

RESULT 27
US-09-813-659-3
; Sequence 3, Application US/09813659
; Patent No. US20020012989A1
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden, Martha S.
; APPLICANT: Linsley, Peter S.
; APPLICANT: Bajorath, Jurgen
; APPLICANT: Fell, H. Perry
; APPLICANT: Gilliland, Lisa K.
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING BISPECIFIC FUSION PROTEINS
; TITLE OF INVENTION: AND METHODS OF PRODUCING BIOLOGICALLY ACTIVE BISPECIFIC
; TITLE OF INVENTION: FUSION PROTEINS IN A MAMMALIAN CELL
; FILE REFERENCE: 30436.18USD2
; CURRENT APPLICATION NUMBER: US/09/813,659
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 09/549,067
; PRIOR FILING DATE: 2000-04-13
; PRIOR APPLICATION NUMBER: 08/539,436
; PRIOR FILING DATE: 1995-10-05
; PRIOR APPLICATION NUMBER: 08/121,054
; PRIOR FILING DATE: 1993-09-13
; PRIOR APPLICATION NUMBER: 08/013,420
; PRIOR FILING DATE: 1993-02-01
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-813-659-3

Query Match      100.0%; Score 39; DB 9; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RAFVTIGK 8
Db      12 RAFVTIGK 19
```

RESULT 28  
US-10-283-610A-3  
; Sequence 3, Application US/10283610A  
; Publication No. US20030219876A1  
; GENERAL INFORMATION:  
; APPLICANT: Ledbetter, Jeffrey A.  
; APPLICANT: Hayden, Martha S.  
; APPLICANT: Linsley, Peter S.  
; APPLICANT: Bajorath, Jürgen  
; APPLICANT: Fell, H. Perry  
; APPLICANT: Gilliland, Lisa K.  
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING BISPECIFIC FUSION PROTEINS  
; TITLE OF INVENTION: AND METHODS OF PRODUCING BIOLOGICALLY ACTIVE BISPECIFIC  
; TITLE OF INVENTION: FUSION PROTEINS IN A MAMMALIAN CELL  
; FILE REFERENCE: ON107E/30436.18USD3  
; CURRENT APPLICATION NUMBER: US/10/283.610A  
; CURRENT FILING DATE: 2002-10-29  
; PRIOR APPLICATION NUMBER: 09/549,067  
; PRIOR FILING DATE: 2000-04-13  
; PRIOR APPLICATION NUMBER: 08/539,436  
; PRIOR FILING DATE: 1995-10-05  
; PRIOR APPLICATION NUMBER: 08/121,054  
; PRIOR FILING DATE: 1993-09-13  
; PRIOR APPLICATION NUMBER: 08/013,420  
; PRIOR FILING DATE: 1993-02-01  
; NUMBER OF SEQ ID NOS: 35  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 3  
; LENGTH: 20  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-283-610A-3

Query Match 100.0%; Score 39; DB 15; Length 20;  
Best Local Similarity 100.0%; Pred. No. 0.14; Indels 0; Gaps 0;  
Matches 8; Conservative 0; Mismatches 0

Qy 1 RAFVTIGK 8  
Db 12 RAFVTIGK 19  
|||||

RESULT 29  
US-10-178-488-25  
; Sequence 25, Application US/10178488  
; Publication No. US20030165535A1  
; GENERAL INFORMATION:  
; APPLICANT: Rovinski, Benjamin  
; APPLICANT: Cao, Shi-Xian  
; APPLICANT: Yao, Fei-Long  
; APPLICANT: Persson, Roy  
; APPLICANT: Klein, Michel H.  
; TITLE OF INVENTION: RETROVIRUS-LIKE PARTICLES MADE NON-INFECTIONOUS BY A  
; TITLE OF INVENTION: PLURILITY OF MUTATIONS  
; FILE REFERENCE: 1038-1238 MTS  
; CURRENT APPLICATION NUMBER: US/10/178,488  
; CURRENT FILING DATE: 2002-10-25  
; PRIOR APPLICATION NUMBER: 09/258,128  
; PRIOR FILING DATE: 1999-02-26  
; NUMBER OF SEQ ID NOS: 26  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 25  
; LENGTH: 21  
; TYPE: PRT  
; ORGANISM: Unknown Organism  
; FEATURE:  
; OTHER INFORMATION: Description of Unknown Organism: Artificial  
US-10-178-488-25

Query Match 100.0%; Score 39; DB 14; Length 21;  
Best Local Similarity 100.0%; Pred. No. 0.15; Indels 0; Gaps 0;  
Matches 8; Conservative 0; Mismatches 0

Qy 1 RAFVTIGK 8  
Db 14 RAFVTIGK 21  
|||||

RESULT 30  
US-10-621-675-160  
; Sequence 160, Application US/10621675  
; Publication No. US20050049398A1  
; GENERAL INFORMATION:  
; APPLICANT: De Leys, Robert  
; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING  
; TITLE OF INVENTION: TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN  
; TITLE OF INVENTION: A PROCESS FOR DETERMINATION OF ANTIBODIES OF  
; TITLE OF INVENTION: BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT  
; TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS  
; TITLE OF INVENTION: CONTAINING THEM  
; FILE REFERENCE: 2752-11  
; CURRENT APPLICATION NUMBER: US/10/621,675  
; CURRENT FILING DATE: 2003-07-18  
; PRIOR APPLICATION NUMBER: US/09/576,824A  
; PRIOR APPLICATION NUMBER: 08/723,425  
; PRIOR FILING DATE: 1996-09-30  
; PRIOR APPLICATION NUMBER: 09/146,028  
; PRIOR FILING DATE: 1993-11-22  
; PRIOR APPLICATION NUMBER: PCT/EP93/00517  
; PRIOR FILING DATE: 1993-03-08  
; PRIOR APPLICATION NUMBER: EP 92400598.6  
; PRIOR FILING DATE: 1992-03-06  
; NUMBER OF SEQ ID NOS: 600  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 160  
; LENGTH: 24  
; TYPE: PRT  
; ORGANISM: Human immunodeficiency virus  
US-10-621-675-160

Query Match 100.0%; Score 39; DB 17; Length 24;  
Best Local Similarity 100.0%; Pred. No. 0.18; Indels 0; Gaps 0;  
Matches 8; Conservative 0; Mismatches 0

Qy 1 RAFVTIGK 8  
Db 15 RAFVTIGK 22  
|||||

RESULT 31  
US-10-777-053-131  
; Sequence 131, Application US/10777053  
; Publication No. US20040132088A1  
; GENERAL INFORMATION:  
; APPLICANT: Simard, John J. L.  
; APPLICANT: Diamond, David C.  
; APPLICANT: Qiu, Zhiyong  
; APPLICANT: Lei, Xiang-Dong  
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF  
; TITLE OF INVENTION: TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN  
; FILE REFERENCE: MANNK.022C1  
; CURRENT APPLICATION NUMBER: US/10/777,053  
; CURRENT FILING DATE: 2004-02-10  
; PRIOR APPLICATION NUMBER: 10/292,413  
; PRIOR FILING DATE: 2002-11-07  
; PRIOR APPLICATION NUMBER: 60/336,968  
; PRIOR FILING DATE: 2001-11-07  
; NUMBER OF SEQ ID NOS: 979  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 131  
; LENGTH: 9  
; TYPE: PRT  
; ORGANISM: Human Immunodeficiency Virus  
US-10-777-053-131

Query Match 94.9%; Score 37; DB 16; Length 9;

Best Local Similarity 87.5%; Pred. No. 1.3e+06;  
Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
Db 2 RAFVTIGK 9

RESULT 32  
US-10-311-111-1  
; Sequence 1, Application US/10311111  
; Publication No. US20030121065A1  
; GENERAL INFORMATION:  
; APPLICANT: SHIBA, KIYOTAKA  
; TITLE OF INVENTION: MULTIFUNCTIONAL BASE SEQUENCE AND ARTIFICIAL GENE CONTAINING THE  
; FILE REFERENCE: 4439-4004  
; CURRENT APPLICATION NUMBER: US/10/311,111  
; CURRENT FILING DATE: 2002-12-13  
; PRIOR APPLICATION NUMBER: JP 2000-180997  
; PRIOR FILING DATE: 2000-06-16  
; NUMBER OF SEQ ID NOS: 34  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 1  
; LENGTH: 20  
; TYPE: PRT  
; ORGANISM: artificial  
; FEATURE:  
; OTHER INFORMATION: Designed peptide  
US-10-311-111-1

Query Match 89.7%; Score 35; DB 14; Length 20;  
Best Local Similarity 87.5%; Pred. No. 1.1;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
Db 12 RTFVTIGK 19

RESULT 33  
US-10-398-932-1  
; Sequence 1, Application US/10398932  
; Publication No. US20040171803A1  
; GENERAL INFORMATION:  
; APPLICANT: SHIBA, KIYOTAKA  
; APPLICANT: OHNO, TSUNEYA  
; TITLE OF INVENTION: ARTIFICIAL PROTEINS WITH ENRICHED IMMUNOGEN  
; FILE REFERENCE: 024918-0103  
; CURRENT APPLICATION NUMBER: US/10/398,932  
; CURRENT FILING DATE: 2003-04-11  
; PRIOR APPLICATION NUMBER: PCT/JP01/08893  
; PRIOR FILING DATE: 2001-10-10  
; PRIOR APPLICATION NUMBER: JP 2000/314288  
; PRIOR FILING DATE: 2000-10-13  
; NUMBER OF SEQ ID NOS: 55  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 1  
; LENGTH: 20  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Synthetically Designed  
US-10-398-932-1

Query Match 89.7%; Score 35; DB 16; Length 20;  
Best Local Similarity 87.5%; Pred. No. 1.1;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
Db 12 RTFVTIGK 19

RESULT 34  
US-10-239-313A-535  
; Sequence 535, Application US/10239313A  
; Publication No. US20030175285A1  
; GENERAL INFORMATION:  
; APPLICANT: KLINGUER - HAMOUR, Christine  
; APPLICANT: CORVAIA, Nathalie  
; APPLICANT: BECK, Alain  
; APPLICANT: GOETSCH, Liliane  
; TITLE OF INVENTION: N-TERMINAL A GLUTAMIC ACID OR A GLUTAMINE IN THE FORM  
; TITLE OF INVENTION: OF A PHYSIOLOGICALLY ACCEPTABLE STRONG ACID  
; FILE REFERENCE: 343 727 - US  
; CURRENT APPLICATION NUMBER: US/10/239,313A  
; CURRENT FILING DATE: 2002-09-19  
; PRIOR APPLICATION NUMBER: FR 00/03711  
; PRIOR FILING DATE: 2000-03-23  
; PRIOR APPLICATION NUMBER: PCT 01/70772  
; PRIOR FILING DATE: 2001-03-22  
; NUMBER OF SEQ ID NOS: 697  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 535  
; LENGTH: 12  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-239-313A-535

Query Match 87.2%; Score 34; DB 14; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1.1;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIG 7  
Db 6 RAFVTIG 12

RESULT 35  
US-10-311-111-4  
; Sequence 4, Application US/10311111  
; Publication No. US20030121065A1  
; GENERAL INFORMATION:  
; APPLICANT: SHIBA, KIYOTAKA  
; TITLE OF INVENTION: MULTIFUNCTIONAL BASE SEQUENCE AND ARTIFICIAL GENE CONTAINING THE  
; FILE REFERENCE: 4439-4004  
; CURRENT APPLICATION NUMBER: US/10/311,111  
; CURRENT FILING DATE: 2002-12-13  
; PRIOR APPLICATION NUMBER: JP 2000-180997  
; PRIOR FILING DATE: 2000-06-16  
; NUMBER OF SEQ ID NOS: 34  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 4  
; LENGTH: 7  
; TYPE: PRT  
; ORGANISM: artificial  
; FEATURE:  
; OTHER INFORMATION: Designed peptide  
US-10-311-111-4

Query Match 76.9%; Score 30; DB 14; Length 7;  
Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 FVTIGK 8  
Db 1 FVTIGK 6

RESULT 36  
US-10-398-932-4  
; Sequence 4, Application US/10398932  
; Publication No. US20040171803A1

GENERAL INFORMATION:  
; APPLICANT: SHIBA, KIYOTAKA  
; APPLICANT: ORNO, TSUNEYA  
; TITLE OF INVENTION: ARTIFICIAL PROTEINS WITH ENRICHED IMMUNOGEN  
; FILE REFERENCE: 024918-0103  
; CURRENT APPLICATION NUMBER: US/10/398,932  
; CURRENT FILING DATE: 2003-04-11  
; PRIOR APPLICATION NUMBER: PCT/JP01/08893  
; PRIOR FILING DATE: 2001-10-10  
; PRIOR APPLICATION NUMBER: JP 2000/314288  
; PRIOR FILING DATE: 2000-10-13  
; NUMBER OF SEQ ID NOS: 55  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 4  
; LENGTH: 7  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Synthetically Designed  
; OTHER INFORMATION: Peptide  
US-10-398-932-4

Query Match 76.9%; Score 30; DB 16; Length 7;  
Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 FVTIGK 8  
Db 1 FVTIGK 6  
|||||

## RESULT 37

US-09-825-886-30  
; Sequence 30, Application US/09825886  
; Publication No. US20020076693A1  
; GENERAL INFORMATION:  
; APPLICANT: Hovanessian, Ara  
; APPLICANT: Callebaut, Christian  
; APPLICANT: Krust, Bernard  
; APPLICANT: Jacotot, Etienne  
; APPLICANT: Muller, Sylviane  
; APPLICANT: Briend, Jean-Paul  
; APPLICANT: Guichard, Giles  
; TITLE OF INVENTION: A NOVEL CELL SURFACE RECEPTOR FOR HIV RETROVIRUSES,  
; FILE REFERENCE: 03495.0166-01000  
; CURRENT APPLICATION NUMBER: US/09/825,886  
; CURRENT FILING DATE: 2001-07-26  
; PRIOR APPLICATION NUMBER: 09/393,302  
; PRIOR FILING DATE: 1999-09-10  
; PRIOR APPLICATION NUMBER: PCT/EP98/01409  
; PRIOR FILING DATE: 1998-03-12  
; PRIOR APPLICATION NUMBER: 60/040,969  
; PRIOR FILING DATE: 1997-03-12  
; NUMBER OF SEQ ID NOS: 32  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 30  
; LENGTH: 9  
; TYPE: PRT  
; ORGANISM: Human immunodeficiency virus  
US-09-825-886-30

Query Match 71.8%; Score 28; DB 9; Length 9;  
Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTI 6  
Db 4 RAFVTI 9  
|||||

## RESULT 38

US-09-997-848A-17  
; Sequence 17, Application US/09997848A  
; Publication No. US20030027322A1  
; GENERAL INFORMATION:  
; APPLICANT: Federoff, Howard J.  
; APPLICANT: Bowers, William J.  
; APPLICANT: Frelinger, John G.  
; APPLICANT: Willis, Richard A.  
; APPLICANT: Evans, Thomas J.  
; APPLICANT: Dewhurst, Stephen  
; APPLICANT: Tolba, Khaled A.  
; APPLICANT: Rosenblatt, Joseph D.  
; TITLE OF INVENTION: HELPER VIRUS-FREE HERPESVIRUS AMPLICON  
; FILE REFERENCE: 12610-011001  
; CURRENT APPLICATION NUMBER: US/09/997,848A  
; CURRENT FILING DATE: 2002-09-10  
; PRIOR APPLICATION NUMBER: US 60/253,858  
; PRIOR FILING DATE: 2000-11-29  
; PRIOR APPLICATION NUMBER: US 60/250,079  
; PRIOR FILING DATE: 2000-11-30  
; NUMBER OF SEQ ID NOS: 18  
; SOFTWARE: FastSEQ for Windows Version 4.0  
; SEQ ID NO 17  
; LENGTH: 9  
; TYPE: PRT  
; ORGANISM: Human immunodeficiency virus  
US-09-997-848A-17

Query Match 71.8%; Score 28; DB 10; Length 9;  
Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTI 6  
Db 4 RAFVTI 9  
|||||

## RESULT 39

US-09-997-848A-18  
; Sequence 18, Application US/09997848A  
; Publication No. US20030027322A1  
; GENERAL INFORMATION:  
; APPLICANT: Federoff, Howard J.  
; APPLICANT: Bowers, William J.  
; APPLICANT: Frelinger, John G.  
; APPLICANT: Willis, Richard A.  
; APPLICANT: Evans, Thomas J.  
; APPLICANT: Dewhurst, Stephen  
; APPLICANT: Tolba, Khaled A.  
; APPLICANT: Rosenblatt, Joseph D.  
; TITLE OF INVENTION: HELPER VIRUS-FREE HERPESVIRUS AMPLICON  
; FILE REFERENCE: 12610-011001  
; CURRENT APPLICATION NUMBER: US/09/997,848A  
; CURRENT FILING DATE: 2002-09-10  
; PRIOR APPLICATION NUMBER: US 60/253,858  
; PRIOR FILING DATE: 2000-11-29  
; PRIOR APPLICATION NUMBER: US 60/250,079  
; PRIOR FILING DATE: 2000-11-30  
; NUMBER OF SEQ ID NOS: 18  
; SOFTWARE: FastSEQ for Windows Version 4.0  
; SEQ ID NO 18  
; LENGTH: 9  
; TYPE: PRT  
; ORGANISM: Human immunodeficiency virus  
US-09-997-848A-18

Query Match 71.8%; Score 28; DB 10; Length 9;  
Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTI 6

```
Db          |||||
            4 RAFVTI 9

RESULT 40
US-10-777-053-139
; Sequence 139, Application US/10777053
; Publication No. US20040132088A1
; GENERAL INFORMATION:
; APPLICANT: Simard, John J. L.
; APPLICANT: Diamond, David C.
; APPLICANT: Qiu, Zhiyong
; APPLICANT: Lei, Xiang-Dong
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
; TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN
; FILE REFERENCE: MANK.022C1
; CURRENT APPLICATION NUMBER: US/10/777,053
; CURRENT FILING DATE: 2004-02-10
; PRIOR FILING DATE: 2002-11-07
; PRIOR APPLICATION NUMBER: 60/336,968
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 979
; SOFTWARE: Fast-Seq for Windows Version 4.0
; SEQ ID NO 139
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human Immunodeficiency Virus
US-10-777-053-139

Query Match          71.8%; Score 28; DB 16; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy          1 RAFVTI 6
            |||||
Db          4 RAFVTI 9

RESULT 41
US-10-494-161-17
; Sequence 17, Application US/10494161
; Publication No. US20050042747A1
; GENERAL INFORMATION:
; APPLICANT: Fantini, Frederic
; APPLICANT: Clayton, Jacques
; TITLE OF INVENTION: HIVGPI20-INDUCED BOB/GPRI5 ACTIVATION
; FILE REFERENCE: 21101.0022P1
; CURRENT APPLICATION NUMBER: US/10/494,161
; CURRENT FILING DATE: 2004-04-29
; PRIOR APPLICATION NUMBER: PCT/US 02/34336
; PRIOR FILING DATE: 2002-10-25
; PRIOR APPLICATION NUMBER: 60/341,045
; PRIOR FILING DATE: 2001-10-29
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: Fast-Seq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:/note =
; OTHER INFORMATION: Synthetic Construct
US-10-494-161-17

Query Match          71.8%; Score 28; DB 17; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy          1 RAFVTI 6
            |||||
Db          4 RAFVTI 9

Db          |||||
            4 RAFVTI 9
```

```
RESULT 42
US-09-858-349-3
; Sequence 3, Application US/09858349
; Patent No. US20020012909A1
; GENERAL INFORMATION:
; APPLICANT: PLAKSIN, Daniel
; TITLE OF INVENTION: SMALL FUNCTIONAL UNITS OF ANTIBODY HEAVY CHAIN VARIABLE REGIONS
; FILE REFERENCE: 87534-2800
; CURRENT APPLICATION NUMBER: US/09/858,349
; CURRENT FILING DATE: 2000-06-02
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 10
; TYPE: PRT
; ORGANISM: mouse hybridoma specific for H-2D + RGPGRAPVTI peptide
US-09-858-349-3

Query Match          71.8%; Score 28; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 19;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy          1 RAFVTI 6
            |||||
Db          5 RAFVTI 10

RESULT 43
US-09-810-310-16
; Sequence 16, Application US/09810310
; Patent No. US20020044948A1
; GENERAL INFORMATION:
; APPLICANT: Khleif, Samir N.
; APPLICANT: Berzofsky, Jay A.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR CO-STIMULATION OF
; IMMUNOLOGICAL RESPONSES TO PEPTIDE ANTIGENS
; FILE REFERENCE: 15280-415100US
; CURRENT APPLICATION NUMBER: US/09/810,310
; CURRENT FILING DATE: 2001-03-14
; PRIOR APPLICATION NUMBER: 60/189,396
; PRIOR FILING DATE: 2000-03-15
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 16
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: HIV PEPTIDE
; OTHER INFORMATION: ANTIGEN
US-09-810-310-16

Query Match          71.8%; Score 28; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 19;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy          1 RAFVTI 6
            |||||
Db          5 RAFVTI 10

RESULT 44
US-09-820-484-8
; Sequence 8, Application US/09820484
; Patent No. US20020142977A1
; GENERAL INFORMATION:
; APPLICANT: Raz, Eyal
; APPLICANT: Cho, Hearn Jay
; APPLICANT: Richman, Douglas
; APPLICANT: Horner, Anthony A.
; TITLE OF INVENTION: Method for Increasing a Cytotoxic T
; Lymphocyte Response in vivo.
```

```
; FILE REFERENCE: 06510-188US1
; CURRENT APPLICATION NUMBER: US/09/820,484
; CURRENT FILING DATE: 2001-03-28
; PRIOR APPLICATION NUMBER: US 60/192,537
; PRIOR FILING DATE: 2000-03-28
; PRIOR APPLICATION NUMBER: US 60/203,567
; PRIOR FILING DATE: 2000-05-11
; PRIOR APPLICATION NUMBER: US 60/215,895
; PRIOR FILING DATE: 2000-07-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: HIV-1 class I-restricted gp120 peptide
US-09-820-484-8

Query Match          71.8%; Score 28; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 19;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RAFVTI 6
Db      5 RAFVTI 10

RESULT 45
US-09-087-513-7
; Sequence 7, Application US/09087513
; Publication NO. US20020182180A1
; GENERAL INFORMATION:
; APPLICANT: KANEKO, Yutaro
; APPLICANT: KOZBOR, Danuta
; TITLE OF INVENTION: METHOD OF INDUCING IMMUNITY TO VIRUSES
; FILE REFERENCE: 0010-0929-0X
; CURRENT APPLICATION NUMBER: US/09/087,513
; CURRENT FILING DATE: 1998-05-29
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 7
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:peptide
US-09-087-513-7

Query Match          71.8%; Score 28; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 19;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RAFVTI 6
Db      5 RAFVTI 10
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Search completed: May 16, 2005, 08:13:00  
Job time : 132 secs

**This Page Blank (uspto)**



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OM protein - protein search, using sw model

Run on: May 16, 2005, 09:40:42 ; Search time 66 Seconds  
(without alignments)

46.880 Million cell updates/sec

Title: SEQ1

Perfect score: 39

Sequence: 1 rafvtgk 8

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 768190

Minimum DB seq length: 0

Maximum DB seq length: 25

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 250 summaries

Database :

A\_Geneseq\_16Dec04:\*

1: Geneseq1980s:\*

2: Geneseq1990s:\*

3: Geneseq2000s:\*

4: Geneseq2001s:\*

5: Geneseq2002s:\*

6: Geneseq2003as:\*

7: Geneseq2003bs:\*

8: Geneseq2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
|------------|-------|-------------|--------|-------|-------------|
| 1          | 39    | 100.0       | 8      | 2     | AAR38167    |
| 2          | 39    | 100.0       | 8      | 2     | AAR72313    |
| 3          | 39    | 100.0       | 8      | 4     | AAB68603    |
| 4          | 39    | 100.0       | 9      | 2     | AAR46523    |
| 5          | 39    | 100.0       | 9      | 2     | AAR62144    |
| 6          | 39    | 100.0       | 9      | 2     | AAY10157    |
| 7          | 39    | 100.0       | 9      | 2     | AAY03692    |
| 8          | 39    | 100.0       | 9      | 5     | AAU96033    |
| 9          | 39    | 100.0       | 9      | 5     | ABG79839    |
| 10         | 39    | 100.0       | 9      | 7     | ADG79993    |
| 11         | 39    | 100.0       | 9      | 7     | ADK50933    |
| 12         | 39    | 100.0       | 9      | 8     | ADR69467    |
| 13         | 39    | 100.0       | 10     | 2     | AAW76840    |
| 14         | 39    | 100.0       | 11     | 2     | AAW19056    |
| 15         | 39    | 100.0       | 11     | 2     | AAW34472    |
| 16         | 39    | 100.0       | 12     | 2     | AAR62152    |
| 17         | 39    | 100.0       | 12     | 2     | AAW54932    |
| 18         | 39    | 100.0       | 13     | 2     | AAW22327    |
| 19         | 39    | 100.0       | 13     | 2     | AAW62890    |
| 20         | 39    | 100.0       | 13     | 4     | AAW99433    |
| 21         | 39    | 100.0       | 14     | 2     | AAR33336    |
| 22         | 39    | 100.0       | 14     | 2     | AAR48504    |
| 23         | 39    | 100.0       | 14     | 2     | AAR66416    |
| 24         | 39    | 100.0       | 14     | 2     | AAR66417    |
| 25         | 39    | 100.0       | 14     | 2     | AAW09264    |

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|----|----|-------|----|---|----------|
| 26 | 39 | 100.0 | 14 | 2 | AAW76864 |
| 27 | 39 | 100.0 | 15 | 1 | AAP82095 |
| 28 | 39 | 100.0 | 15 | 1 | AAP91228 |
| 29 | 39 | 100.0 | 15 | 2 | AAR06294 |
| 30 | 39 | 100.0 | 15 | 2 | AAR21343 |
| 31 | 39 | 100.0 | 15 | 2 | AAR38187 |
| 32 | 39 | 100.0 | 15 | 2 | AAR32207 |
| 33 | 39 | 100.0 | 15 | 2 | AAR51619 |
| 34 | 39 | 100.0 | 15 | 2 | AAR74603 |
| 35 | 39 | 100.0 | 15 | 2 | AAR66420 |
| 36 | 39 | 100.0 | 15 | 2 | AAR66421 |
| 37 | 39 | 100.0 | 15 | 2 | AAR66414 |
| 38 | 39 | 100.0 | 15 | 2 | AAR66419 |
| 39 | 39 | 100.0 | 15 | 2 | AAR66422 |
| 40 | 39 | 100.0 | 15 | 2 | AAR68789 |
| 41 | 39 | 100.0 | 15 | 2 | AAW05535 |
| 42 | 39 | 100.0 | 15 | 2 | AAR92033 |
| 43 | 39 | 100.0 | 15 | 2 | AAW07931 |
| 44 | 39 | 100.0 | 15 | 2 | AAR92007 |
| 45 | 39 | 100.0 | 15 | 2 | AAW24219 |
| 46 | 39 | 100.0 | 15 | 2 | AAW10348 |
| 47 | 39 | 100.0 | 15 | 2 | AAW22031 |
| 48 | 39 | 100.0 | 15 | 2 | AAW39275 |
| 49 | 39 | 100.0 | 15 | 2 | AAW40316 |
| 50 | 39 | 100.0 | 15 | 2 | AAW76897 |
| 51 | 39 | 100.0 | 15 | 2 | AAW76898 |
| 52 | 39 | 100.0 | 15 | 2 | AAW76900 |
| 53 | 39 | 100.0 | 15 | 2 | AAW54929 |
| 54 | 39 | 100.0 | 15 | 2 | AAW06896 |
| 55 | 39 | 100.0 | 15 | 2 | AAW24466 |
| 56 | 39 | 100.0 | 15 | 2 | AAW25189 |
| 57 | 39 | 100.0 | 15 | 2 | AAW25204 |
| 58 | 39 | 100.0 | 15 | 2 | AAW05356 |
| 59 | 39 | 100.0 | 15 | 2 | AAW72821 |
| 60 | 39 | 100.0 | 15 | 2 | AAW87620 |
| 61 | 39 | 100.0 | 15 | 2 | AAW04680 |
| 62 | 39 | 100.0 | 15 | 3 | AAW83916 |
| 63 | 39 | 100.0 | 15 | 3 | AAW66439 |
| 64 | 39 | 100.0 | 15 | 3 | AAW66455 |
| 65 | 39 | 100.0 | 15 | 3 | AAW85591 |
| 66 | 39 | 100.0 | 15 | 3 | AAW15875 |
| 67 | 39 | 100.0 | 15 | 4 | AAW99083 |
| 68 | 39 | 100.0 | 15 | 4 | AAW92345 |
| 69 | 39 | 100.0 | 15 | 4 | AAW92348 |
| 70 | 39 | 100.0 | 15 | 4 | AAW68601 |
| 71 | 39 | 100.0 | 15 | 5 | AAW15743 |
| 72 | 39 | 100.0 | 15 | 5 | AAW96031 |
| 73 | 39 | 100.0 | 15 | 5 | AAW97690 |
| 74 | 39 | 100.0 | 15 | 5 | ABG68654 |
| 75 | 39 | 100.0 | 15 | 5 | ABG68663 |
| 76 | 39 | 100.0 | 15 | 6 | AAE35161 |
| 77 | 39 | 100.0 | 15 | 7 | ADN14074 |
| 78 | 39 | 100.0 | 15 | 8 | ADR04041 |
| 79 | 39 | 100.0 | 16 | 2 | AAR24939 |
| 80 | 39 | 100.0 | 16 | 2 | AAW68326 |
| 81 | 39 | 100.0 | 16 | 3 | AAW68203 |
| 82 | 39 | 100.0 | 16 | 3 | AAW52857 |
| 83 | 39 | 100.0 | 16 | 4 | AAW58618 |
| 84 | 39 | 100.0 | 17 | 2 | AAR42057 |
| 85 | 39 | 100.0 | 17 | 2 | AAW42057 |
| 86 | 39 | 100.0 | 17 | 7 | ADN14075 |
| 87 | 39 | 100.0 | 18 | 2 | AAR31277 |
| 88 | 39 | 100.0 | 18 | 2 | AAR30032 |
| 89 | 39 | 100.0 | 18 | 2 | AAR26713 |
| 90 | 39 | 100.0 | 18 | 2 | AAR44190 |
| 91 | 39 | 100.0 | 18 | 2 | AAR58548 |
| 92 | 39 | 100.0 | 18 | 2 | AAW63062 |
| 93 | 39 | 100.0 | 18 | 3 | AAW96191 |
| 94 | 39 | 100.0 | 18 | 4 | ABB83113 |
| 95 | 39 | 100.0 | 19 | 2 | AAW24218 |
| 96 | 39 | 100.0 | 20 | 2 | AAR04434 |
| 97 | 39 | 100.0 | 20 | 2 | AAR60203 |
| 98 | 39 | 100.0 | 20 | 2 | AAW76943 |

|          |           |
|----------|-----------|
| AAW76864 | Fusion im |
| ASP2095  | Env-K1 pe |
| ASP91228 | Peptide c |
| AAR06294 | Peptide d |
| AAR21343 | HIV-1 gp1 |
| AAR38187 | V3 loop p |
| AAR32207 | Sequence  |
| AAR51619 | V3 loop r |
| AAR74603 | HIV-1 var |
| AAR66420 | HIV-1 III |
| AAR66421 | HIV-1 III |
| AAR66414 | HIV-1 III |
| AAR66419 | HIV-1 III |
| AAR66422 | HIV-1 III |
| AAR68789 | Cytotoxic |
| AAW05535 | HIV-1 gp1 |
| AAR92033 | Hydrophil |
| AAW07931 | gp120 pep |
| AAR92007 | HIV-1 V3  |
| AAW24219 | CD4+ T-ly |
| AAW10348 | HIV epit  |
| AAW22031 | Antigenic |
| AAW39275 | HIV-1 syn |
| AAW40316 | HIV-1 III |
| AAW76897 | Fusion im |
| AAW76898 | Fusion im |
| AAW76900 | Fusion im |
| AAW54929 | HIV gp120 |
| AAW06896 | Sequence  |
| AAW24466 | HIV pepri |
| AAW25189 | HIV prote |
| AAW25204 | HIV V3 pe |
| AAW05356 | HIV-1 CLU |
| AAW72821 | HIV-1 gp1 |
| AAW87620 | Epitope o |
| AAW04680 | HIV-1 gp1 |
| AAW83916 | HIV-1 env |
| AAW66439 | HLA-A2-b1 |
| AAW66455 | HLA-A3-b1 |
| AAW85591 | HIV relat |
| AAW15875 | Human che |
| AAW99083 | Vaccine r |
| AAW92345 | Virus rel |
| AAW92348 | Virus rel |
| AAW68601 | HIV gp120 |
| AAW15743 | Human imm |
| AAW96031 | HIV epit  |
| AAW97690 | HIV CTL e |
| ABG68654 | HIV-1 Fl8 |
| ABG68663 | HIV-1 Fl8 |
| AAE35161 | HIV CTL e |
| ADN14074 | HIV helpe |
| ADR04041 | Immune re |
| AAR24939 | HIV pepri |
| AAW68326 | MHC bindi |
| AAW68203 | Altered M |
| AAW52857 | Altered M |
| AAW58618 | Altered M |
| AAR42057 | Peptide C |
| AAW40414 | Lipopecti |
| ADN14075 | HIV helpe |
| AAR31277 | HIV princ |
| AAR30032 | HIV princ |
| AAR26713 | HIV-PND-p |
| AAR44190 | gp120 V3  |
| AAR58548 | HIV-1 iso |
| AAW63062 | Human imm |
| AAW96191 | Glycoprot |
| ABB83113 | Lipopecti |
| AAW24218 | CD4+ T-ly |
| AAR04434 | Human imm |
| AAR60203 | HIV gp110 |
| AAW76943 | Fusion im |

|     |    |       |    |   |          |                    |     |    |      |    |   |          |                    |
|-----|----|-------|----|---|----------|--------------------|-----|----|------|----|---|----------|--------------------|
| 99  | 39 | 100.0 | 20 | 2 | AAW54930 | Aaw54930 HIV gp120 | 172 | 34 | 87.2 | 15 | 2 | AAW66427 | Aar66427 HIV-1 III |
| 100 | 39 | 100.0 | 20 | 8 | ADR18886 | Adr18886 HIV-1 V3- | 173 | 34 | 87.2 | 15 | 2 | AAW66428 | Aar66428 HIV-1 III |
| 101 | 39 | 100.0 | 21 | 2 | AAW3073  | Aar3073 Antigenic  | 174 | 34 | 87.2 | 15 | 2 | AAW66429 | Aar66429 HIV-1 III |
| 102 | 39 | 100.0 | 21 | 2 | AAW34475 | Aaw34475 Accepter  | 175 | 34 | 87.2 | 15 | 2 | AAW66430 | Aar66430 HIV-1 III |
| 103 | 39 | 100.0 | 21 | 2 | AAW79180 | Aaw79180 Fusion im | 176 | 34 | 87.2 | 16 | 2 | AAW66431 | Aar66431 HIV-1 III |
| 104 | 39 | 100.0 | 21 | 2 | AAW76901 | Aaw76901 Fusion im | 177 | 34 | 87.2 | 17 | 1 | AAW66432 | Aar66432 HIV-1 III |
| 105 | 39 | 100.0 | 21 | 2 | AAW75478 | Aaw75478 HIV-1 str | 178 | 34 | 87.2 | 17 | 1 | AAW66433 | Aar66433 HIV-1 III |
| 106 | 39 | 100.0 | 21 | 2 | AAW16052 | Aay16052 HIV-1 iso | 179 | 34 | 87.2 | 17 | 1 | AAW66434 | Aar66434 HIV-1 III |
| 107 | 39 | 100.0 | 21 | 2 | AAW85568 | Aaw85568 Human imm | 180 | 34 | 87.2 | 17 | 1 | AAW66435 | Aar66435 HIV-1 III |
| 108 | 39 | 100.0 | 21 | 3 | AAW15012 | Aab15012 Peptide P | 181 | 34 | 87.2 | 17 | 1 | AAW66436 | Aar66436 HIV-1 III |
| 109 | 39 | 100.0 | 21 | 4 | AAW08699 | Aau08699 Retroviri | 182 | 34 | 87.2 | 17 | 2 | AAW66437 | Aar66437 HIV-1 III |
| 110 | 39 | 100.0 | 22 | 2 | AAW42153 | Aar42153 gp120 V3  | 183 | 34 | 87.2 | 17 | 2 | AAW66438 | Aar66438 HIV-1 III |
| 111 | 39 | 100.0 | 22 | 2 | AAW57470 | Aar57470 HIV BRU V | 184 | 34 | 87.2 | 17 | 2 | AAW66439 | Aar66439 HIV-1 III |
| 112 | 39 | 100.0 | 22 | 2 | AAW07392 | Aaw07392 HIV-1 str | 185 | 34 | 87.2 | 17 | 2 | AAW66440 | Aar66440 HIV-1 III |
| 113 | 39 | 100.0 | 22 | 2 | AAW07488 | Aay07488 HIV-1 str | 186 | 34 | 87.2 | 17 | 2 | AAW66441 | Aar66441 HIV-1 III |
| 114 | 39 | 100.0 | 22 | 3 | AAW85137 | Aay85137 HIV-1 III | 187 | 34 | 87.2 | 17 | 2 | AAW66442 | Aar66442 HIV-1 III |
| 115 | 39 | 100.0 | 22 | 6 | ABU07537 | Abu07537 Human N-a | 188 | 34 | 87.2 | 17 | 2 | AAW66443 | Aar66443 HIV-1 III |
| 116 | 39 | 100.0 | 23 | 2 | AAW04502 | Aar04502 Cpd. elic | 189 | 34 | 87.2 | 17 | 8 | AAW66444 | Aar66444 HIV-1 III |
| 117 | 39 | 100.0 | 23 | 4 | AAW66704 | Aab66704 Human imm | 190 | 34 | 87.2 | 17 | 2 | AAW66445 | Aar66445 HIV-1 III |
| 118 | 39 | 100.0 | 23 | 4 | AAW06211 | Aar06211 Immunosp  | 191 | 34 | 87.2 | 18 | 2 | AAW66446 | Aar66446 HIV-1 III |
| 119 | 39 | 100.0 | 24 | 2 | AAW07018 | Aar07018 Residues  | 192 | 34 | 87.2 | 18 | 8 | AAW66447 | Aar66447 HIV-1 III |
| 120 | 39 | 100.0 | 24 | 2 | AAW26565 | Aar26565 Sequence  | 193 | 34 | 87.2 | 20 | 1 | AAW66448 | Aar66448 HIV-1 III |
| 121 | 39 | 100.0 | 24 | 2 | AAW29233 | Aar29233 Heterocon | 194 | 34 | 87.2 | 20 | 2 | AAW66449 | Aar66449 HIV-1 III |
| 122 | 39 | 100.0 | 24 | 2 | AAW26870 | Aar26870 HIV gp120 | 195 | 34 | 87.2 | 20 | 2 | AAW66450 | Aar66450 HIV-1 III |
| 123 | 39 | 100.0 | 24 | 2 | AAW32406 | Aar32406 Sequence  | 196 | 34 | 87.2 | 20 | 6 | AAW66451 | Aar66451 HIV-1 III |
| 124 | 39 | 100.0 | 24 | 2 | AAW33190 | Aar33190 Sequence  | 197 | 33 | 84.6 | 15 | 2 | AAW66452 | Aar66452 HIV-1 III |
| 125 | 39 | 100.0 | 24 | 2 | AAW38165 | Aar38165 V3 loop p | 198 | 33 | 84.6 | 15 | 2 | AAW66453 | Aar66453 HIV-1 III |
| 126 | 39 | 100.0 | 24 | 2 | AAW44191 | Aar44191 gp120 V3  | 199 | 30 | 76.9 | 7  | 5 | AAW66454 | Aar66454 HIV-1 III |
| 127 | 39 | 100.0 | 24 | 2 | AAW63821 | Aar63821 HIV-1 gp1 | 200 | 30 | 76.9 | 7  | 5 | AAW66455 | Aar66455 HIV-1 III |
| 128 | 39 | 100.0 | 24 | 2 | AAW74608 | Aaw74608 HIV-1 gp1 | 201 | 30 | 76.9 | 15 | 2 | AAW66456 | Aar66456 HIV-1 III |
| 129 | 39 | 100.0 | 24 | 2 | AAW67414 | Aaw67414 HIV-1 pep | 202 | 29 | 74.4 | 15 | 2 | AAW66457 | Aar66457 HIV-1 III |
| 130 | 39 | 100.0 | 24 | 2 | AAW98904 | Aaw98904 HIV-1 vac | 203 | 29 | 74.4 | 15 | 2 | AAW66458 | Aar66458 HIV-1 III |
| 131 | 39 | 100.0 | 24 | 2 | AAW22581 | Aay22581 HIV LDL b | 204 | 29 | 74.4 | 15 | 2 | AAW66459 | Aar66459 HIV-1 III |
| 132 | 39 | 100.0 | 24 | 2 | AAW22583 | Aay22583 HIV LDL b | 205 | 29 | 74.4 | 15 | 2 | AAW66460 | Aar66460 HIV-1 III |
| 133 | 39 | 100.0 | 24 | 2 | AAW39769 | Aay39769 HIV1 chim | 206 | 29 | 74.4 | 20 | 2 | AAW66461 | Aar66461 HIV-1 III |
| 134 | 39 | 100.0 | 24 | 2 | AAW15873 | Aab15873 Human che | 207 | 29 | 74.4 | 20 | 2 | AAW66462 | Aar66462 HIV-1 III |
| 135 | 39 | 100.0 | 24 | 3 | AAW68602 | Aap68602 HIV gp120 | 208 | 29 | 74.4 | 20 | 2 | AAW66463 | Aar66463 HIV-1 III |
| 136 | 39 | 100.0 | 24 | 1 | AAW82464 | Aap82464 Peptide c | 209 | 29 | 74.4 | 20 | 2 | AAW66464 | Aar66464 HIV-1 III |
| 137 | 39 | 100.0 | 25 | 1 | AAW90281 | Aap90281 Peptide 1 | 210 | 29 | 74.4 | 20 | 2 | AAW66465 | Aar66465 HIV-1 III |
| 138 | 39 | 100.0 | 25 | 1 | AAW04475 | Aar04475 Human imm | 211 | 28 | 71.8 | 9  | 2 | AAW66466 | Aar66466 HIV-1 III |
| 139 | 39 | 100.0 | 25 | 2 | AAW08276 | Aar08276 HIV pepti | 212 | 28 | 71.8 | 9  | 2 | AAW66467 | Aar66467 HIV-1 III |
| 140 | 39 | 100.0 | 25 | 2 | AAW13120 | Aar13120 Binding s | 213 | 28 | 71.8 | 9  | 5 | AAW66468 | Aar66468 HIV-1 III |
| 141 | 39 | 100.0 | 25 | 2 | AAW15058 | Aar15058 HIV-1 amp | 214 | 28 | 71.8 | 9  | 6 | AAW66469 | Aar66469 HIV-1 III |
| 142 | 39 | 100.0 | 25 | 2 | AAW31276 | Aar31276 HIV princ | 215 | 28 | 71.8 | 9  | 8 | AAW66470 | Aar66470 HIV-1 III |
| 143 | 39 | 100.0 | 25 | 2 | AAW30031 | Aar30031 HIV princ | 216 | 28 | 71.8 | 9  | 8 | AAW66471 | Aar66471 HIV-1 III |
| 144 | 39 | 100.0 | 25 | 2 | AAW26712 | Aar26712 HIV-PND-p | 217 | 28 | 71.8 | 10 | 2 | AAW66472 | Aar66472 HIV-1 III |
| 145 | 39 | 100.0 | 25 | 2 | AAW3222  | Aar3222 HIV gp120  | 218 | 28 | 71.8 | 10 | 2 | AAW66473 | Aar66473 HIV-1 III |
| 146 | 39 | 100.0 | 25 | 2 | AAW41336 | Aar41336 HIV gp120 | 219 | 28 | 71.8 | 10 | 2 | AAW66474 | Aar66474 HIV-1 III |
| 147 | 39 | 100.0 | 25 | 2 | AAW41330 | Aar41330 HIV gp120 | 220 | 28 | 71.8 | 10 | 2 | AAW66475 | Aar66475 HIV-1 III |
| 148 | 39 | 100.0 | 25 | 2 | AAW36587 | Aar36587 Virus neu | 221 | 28 | 71.8 | 10 | 2 | AAW66476 | Aar66476 HIV-1 III |
| 149 | 39 | 100.0 | 25 | 2 | AAW72819 | Aaw72819 HIV-1 gp1 | 222 | 28 | 71.8 | 10 | 2 | AAW66477 | Aar66477 HIV-1 III |
| 150 | 39 | 100.0 | 25 | 2 | AAW87618 | Aaw87618 Epitope o | 223 | 28 | 71.8 | 10 | 2 | AAW66478 | Aar66478 HIV-1 III |
| 151 | 39 | 100.0 | 25 | 4 | AAW09522 | Aae09522 Human imm | 224 | 28 | 71.8 | 10 | 3 | AAW66479 | Aar66479 HIV-1 III |
| 152 | 39 | 100.0 | 25 | 8 | AAW04427 | Aac04427 Human imm | 225 | 28 | 71.8 | 10 | 3 | AAW66480 | Aar66480 HIV-1 III |
| 153 | 37 | 94.9  | 25 | 8 | AAW66430 | Aar66430 HIV-1 III | 226 | 28 | 71.8 | 10 | 3 | AAW66481 | Aar66481 HIV-1 III |
| 154 | 37 | 94.9  | 25 | 2 | AAW66434 | Aar66434 HIV-1 III | 227 | 28 | 71.8 | 10 | 3 | AAW66482 | Aar66482 HIV-1 III |
| 155 | 35 | 89.7  | 15 | 2 | AAW22329 | Aaw22329 HIV-1 cll | 228 | 28 | 71.8 | 10 | 3 | AAW66483 | Aar66483 HIV-1 III |
| 156 | 35 | 89.7  | 15 | 2 | AAW62892 | Aaw62892 Peptide s | 229 | 28 | 71.8 | 10 | 3 | AAW66484 | Aar66484 HIV-1 III |
| 157 | 35 | 89.7  | 19 | 2 | AAW05775 | Abb05775 HIV gp120 | 230 | 28 | 71.8 | 10 | 4 | AAW66485 | Aar66485 HIV-1 III |
| 158 | 35 | 89.7  | 20 | 5 | AAW15657 | Aao15657 Strong im | 231 | 28 | 71.8 | 10 | 4 | AAW66486 | Aar66486 HIV-1 III |
| 159 | 35 | 89.7  | 20 | 5 | AAW62138 | Aar62138 HIV-1 gp1 | 232 | 28 | 71.8 | 10 | 4 | AAW66487 | Aar66487 HIV-1 III |
| 160 | 35 | 89.7  | 8  | 2 | AAW62138 | Aar62138 HIV-1 gp1 | 233 | 28 | 71.8 | 10 | 4 | AAW66488 | Aar66488 HIV-1 III |
| 161 | 34 | 87.2  | 9  | 2 | AAW68768 | Adk68768 Epitope 1 | 234 | 28 | 71.8 | 10 | 5 | AAW66489 | Aar66489 HIV-1 III |
| 162 | 34 | 87.2  | 9  | 8 | AAW62165 | Aar62165 HIV-1 gp1 | 235 | 28 | 71.8 | 10 | 5 | AAW66490 | Aar66490 HIV-1 III |
| 163 | 34 | 87.2  | 10 | 2 | AAW54661 | Aaw54661 Peptide f | 236 | 28 | 71.8 | 10 | 5 | AAW66491 | Aar66491 HIV-1 III |
| 164 | 34 | 87.2  | 10 | 2 | AAW62167 | Aar62167 HIV-1 gp1 | 237 | 28 | 71.8 | 10 | 5 | AAW66492 | Aar66492 HIV-1 III |
| 165 | 34 | 87.2  | 11 | 2 | AAW6852  | Aaw6852 Fusion im  | 238 | 28 | 71.8 | 10 | 5 | AAW66493 | Aar66493 HIV-1 III |
| 166 | 34 | 87.2  | 11 | 2 | AAW99432 | Aam99432 Vaccine r | 239 | 28 | 71.8 | 10 | 5 | AAW66494 | Aar66494 HIV-1 III |
| 167 | 34 | 87.2  | 12 | 4 | AAW95357 | Aap95357 Variable  | 240 | 28 | 71.8 | 10 | 5 | AAW66495 | Aar66495 HIV-1 III |
| 168 | 34 | 87.2  | 15 | 1 | AAW33460 | Aar33460 Sequence  | 241 | 28 | 71.8 | 10 | 5 | AAW66496 | Aar66496 HIV-1 III |
| 169 | 34 | 87.2  | 15 | 2 | AAW62166 | Aar62166 HIV-1 gp1 | 242 | 28 | 71.8 | 10 | 5 | AAW66497 | Aar66497 HIV-1 III |
| 170 | 34 | 87.2  | 15 | 2 | AAW62166 | Aar62166 HIV-1 gp1 | 243 | 28 | 71.8 | 10 | 5 | AAW66498 | Aar66498 HIV-1 III |
| 171 | 34 | 87.2  | 15 | 2 | AAW62166 | Aar62166 HIV-1 gp1 | 244 | 28 | 71.8 | 10 | 5 | AAW66499 | Aar66499 HIV-1 III |

245 28 71.8 10 6 ABP60029 Abp60029 HIV antig  
 246 28 71.8 10 6 ABR39122 ABR39122 HIV-1 gp1  
 247 28 71.8 10 6 ABP72314 ABP72314 HIV-1 p18  
 248 28 71.8 10 6 ADA50228 ADA50228 Human imm  
 249 28 71.8 10 7 ADE79992 ADE79992 HIV1 carr  
 250 28 71.8 10 7 ADE79994 ADE79994 HIV1 carr

## ALIGNMENTS

## RESULT 1

AAR38167  
 ID AAR38167 standard; peptide; 8 AA.

XX AC AAR38167;  
 XX  
 DT 27-AUG-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 12-OCT-1993 (first entry)  
 XX V3 loop peptide R8K.  
 DE  
 XX  
 KW gp120; HIV-1; cytotoxic T-lymphocyte; CTL; T-helper; AIDS; infection.  
 XX Human immunodeficiency virus 1.  
 OS  
 XX WO9310816-A1.  
 PN  
 XX  
 PD 10-JUN-1993.  
 PF  
 XX 02-DEC-1992; 92WO-US010378.  
 PR  
 XX 02-DEC-1991; 91US-00800932.  
 PR 16-SEP-1992; 92US-00945865.  
 XX  
 PA (TEXA ) UNIV TEXAS SYSTEM.

XX PI Sastrey JK, Arlinghaus RB, Platsoucas CD, Nehete PN;  
 XX WPI; 1993-196739/24.  
 DR  
 XX Peptide composition for treating and preventing viral infections -  
 PT comprise CTL-inducing epitope and HIV infection-inhibiting sequence or T  
 PT helper cell-inducing sequence.  
 XX Claim 19; Page 95; 130pp; English.

XX CC HIV gp120 V3 loop-derived peptides (AAR38170-87) are successful in  
 CC generating CTL responses, esp. peptide R15K (AAR38187); the T-helper cell  
 CC -inducing peptide includes the sequence C19A (AAR38164); HIV infection-  
 CC inhibiting peptides are given in AAR38188-206, and are esp. peptides  
 CC R15K, N24G, E13V, R8K, T13Q and H13N (AAR38165-69). The peptides may also  
 CC be derived from an influenza virus protein or a sendai virus protein  
 CC (AAR41014-15). It was observed that peptide R8K (amino acids 322-329),  
 CC with sequences derived from the V3 loop of HIV-1 IIIB, inhibits HIV-1  
 CC infection of primary human T cells by 66% at 1 microg/ml (ca. 1.25  
 CC micromol). (Updated on 25-MAR-2003 to correct PN field.) (Updated on 27-AUG  
 CC -2003 to correct OS field.)

XX SQ Sequence 8 AA;

Query Match 100.0%; Score 39; DB 2; Length 8;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
 Db |||||  
 1 RAFVTIGK 8

## RESULT 2

AAR72313

ID AAR72313 standard; peptide; 8 AA.  
 XX AAR72313;  
 AC  
 DT 25-MAR-2003 (revised)  
 DT 20-OCT-1995 (first entry)  
 XX Anti-HIV MBPC peptide moiety.  
 DE  
 XX Multiple branch peptide construction; MBPC; HIV-1;  
 KW human immunodeficiency virus type 1; virucide.  
 XX  
 OS Synthetic.  
 XX WO9507929-A1.  
 PN  
 XX 23-MAR-1995.  
 PD  
 XX 13-SEP-1994; 94WO-GB001992.  
 PF  
 XX 13-SEP-1993; 93GB-00018901.  
 PR  
 PR 15-JUN-1994; 94US-00260086.  
 XX  
 PA (ARME-) ARMEL SA.  
 PA (MCKE/) MCKELVEY I E.  
 XX  
 PI Sabatier JM, Benjouad A, Yahi N, Fenouillet E, Mabrouk K;  
 PI Gluckman J, Van Rietschoten J, Rochat H;  
 XX  
 DR WPI; 1995-131312/17.  
 XX Multiple branch peptide constructions formed from the V3 loop of HIV-1  
 PT gp120 - used to treat HIV infection.  
 XX  
 PS Example 2; Page 11; 39pp; English.  
 XX Multiple branch peptide constructions (MBPCs) are formed from the V3 loop  
 CC of HIV-1 gp120. Each MBPC includes multiple peptide moieties  
 CC incorporating the GPCR consensus sequence, each attached to the amino  
 CC group of a lysine residue, forming a dendritic structure. A peptide  
 CC moiety (AAR72313) not including the consensus was unable to inhibit HIV-1  
 CC syncytia formation. (Updated on 25-MAR-2003 to correct PN field.)  
 XX Sequence 8 AA;  
 SQ  
 Query Match 100.0%; Score 39; DB 2; Length 8;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RAFVTIGK 8  
 Db |||||  
 1 RAFVTIGK 8  
 RESULT 3  
 AAB68603  
 ID AAB68603 standard; peptide; 8 AA.  
 XX AAB68603;  
 AC  
 XX 11-SEP-2003 (revised)  
 DT 25-APR-2001 (first entry)  
 XX HIV gp120 V3 loop peptide #3.  
 DE  
 XX HIV gp120 V3 loop; liposome composition; HIV infection.  
 KW Human immunodeficiency virus 1.  
 XX US6180134-B1.  
 PN  
 XX 30-JAN-2001.  
 PD  
 XX

```

PF 07-JUN-1995; 95US-00480332.
XX
XX 23-MAR-1993; 93US-00035443.
PR 29-SEP-1994; 94US-00316436.
XX
XX (SEQU-) SEQUUS PHARM INC.
PA
PI Zalipsky S, Woodle MC, Martin FU, Barenholz Y;
XX
XX WPI; 2001-201897/20.
DR
XX
XX Liposome composition for use in treating septic shock comprises liposomes
PT having an outer surface layer of polyethylene glycol chains, and a
PT polypeptide or polyaccharide effector molecule.
XX
XX Disclosure; Fig 13; 32pp; English.
PS
XX
XX The present invention relates to a liposome composition comprising
CC liposomes having an outer surface layer of polyethylene glycol chains,
CC each having a free distal end. A polypeptide or polyaccharide effector
CC molecule is covalently attached to a portion of the distal ends. The
CC effector interferes with specific binding of pathogen or cell in a
CC bloodstream to a target cell or cell matrix, and is rapidly removed by
CC renal clearance from the bloodstream when administered in free form. The
CC liposome composition may be used in treating a condition mediated by
CC binding a pathogen or cell in the bloodstream to a target cell or cell
CC matrix. It can be used in treating septic shock, toxic shock, colonic
CC inflammation, leukemic cell proliferation, or HIV infection. The present
CC sequence is a peptide of the V3 loop of HIV envelope protein gp120. This
CC peptide may be used in the composition of the present invention. gp120
CC binds to the CD4 receptor during HIV infection of lymphocytes. By
CC introducing the present peptide, the CD4 receptors are blocked, thereby
CC inhibiting HIV infection. (Updated on 11-SEP-2003 to standardise OS
CC field)
XX
XX Sequence 8 AA;
SQ
Query Match 100.0%; Score 39; DB 4; Length 8;
Best Local Similarity 100.0%; Pred. No. 1.8e+06;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RAFVTIGK 8
DB |||||
1 RAFVTIGK 8
RESULT 4
AAR46523
ID AAR46523 standard; peptide; 9 AA.
XX
AC AAR46523;
XX
XX 25-MAR-2003 (revised)
DT 30-MAR-1994 (first entry)
XX
DE HIV gp120 residues 314-322.
XX
XX Vaccine; polar lipid; targeting; immune response; antigenic peptide;
KW antigen; human immunodeficiency virus.
XX
XX Synthetic.
OS
XX US2556641-A.
PN
XX
XX 26-OCT-1993.
XX
XX 09-JUL-1992; 92US-00911209.
XX
XX 01-NOV-1990; 90US-00607982.
XX
XX (OREG-) STATE OF OREGON.
PA
XX Yatvin MB, Stowell MHB, Malkovsky M;
PI
WPI; 1993-350862/44.
XX
XX New covalent conjugate of antigenic peptide and polar lipid e.g.
PT sphingosine - useful in protective vaccines, treatment of auto-immune
PT disease and preventing of transplant rejection.
XX
XX Disclosure; Page 13; 15pp; English.
PS
XX
XX The peptide is an example of an antigenic peptide which may be joined via
CC a functional linker group, opt. at the two ends of a spacer group, to a
CC polar lipid carrier, e.g. sphingosine, ceramide, phosphatidyl choline,
CC ethanolamine, inositol or serine, cardiolipin or phosphatidic acid. The
CC compsn. may be used as a vaccine against HIV infection. An advantage of
CC the carrier system is that when incorporated into the compsn. entry of
CC the antigenic peptide into the cells of the immune system is facilitated
CC (no need for endocytosis) and targeting to specific organelles becomes
CC possible. Unlike known vaccines, intracellular synthesis of viral
CC antigens is not necessary for presentation via the MHC class I antigen
CC pathway, nor intracellular proteolysis for presentation via the MHC class
CC II antigen pathway, so both humoral and cellular immunity is achieved.
CC Also, when a spacer is present, the antigen release rate may be
CC controlled. See also AAR46507-47. (Updated on 25-MAR-2003 to correct PF
CC field.) (Updated on 25-MAR-2003 to correct PR field.)
XX
XX Sequence 9 AA;
SQ
Query Match 100.0%; Score 39; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.8e+06;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RAFVTIGK 8
DB |||||
2 RAFVTIGK 9
RESULT 5
AAR62144
ID AAR62144 standard; peptide; 9 AA.
XX
AC AAR62144;
XX
XX 27-AUG-2003 (revised)
DT 25-MAR-2003 (revised)
DT 02-MAY-1995 (first entry)
XX
DE HIV-1 gp120/41 protein motif similar to U1 snRNP 70K protein.
XX
KW Small ribonucleoprotein complex; U1 snRNP; 70K protein; epitope;
KW autoantibody; immunoinfective cluster virus; nuclear protein antigen;
KW systemic rheumatic disorder; human immunodeficiency virus; HIV-1;
KW systemic lupus erythematosus; mixed connective tissue disease;
KW scleroderma; glycoprotein 120; glycoprotein 41.
XX
OS Human immunodeficiency virus 1.
XX
XX WO9420141-A1.
PN
XX
XX 15-SEP-1994.
PD
XX
XX 10-MAR-1994; 94WO-US002631.
PF
XX
XX 11-MAR-1993; 93US-00029850.
PR
XX
XX (UYSC-) UNIV SOUTHERN CALIFORNIA.
PA
XX
XX Douvas A, Takehana Y, Ehresmann G;
PI
XX
XX WPI; 1994-302689/37.
DR
XX
XX Methods for treating immunoinfective cluster virus infections - utilise
PT antibodies or fragments characteristic of auto antibodies produced by
PT patients with rheumatic disorders.

```



CC wild-type virus. Sequences AAU03681-704 represent CTL peptide epitopes of  
 CC the HIV/SIV (H) epitope string. (Updated on 17-OCT-2003 to standardise OS  
 CC field)

XX Sequence 9 AA;  
 SQ Query Match 100.0%; Score 39; DB 2; Length 9;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
 Db 2 RAFVTIGK 9

RESULT 8  
 AAU96033  
 ID AAU96033 standard; protein; 9 AA.

XX AC AAU96033;  
 XX 29-AUG-2003 (revised)  
 DT 02-JUL-2002 (first entry)  
 XX HIV epitope, HIV-1 gp120 B\*2705, peptide sequence.  
 DE Vaccine; non-replicating; viral tubule; immunogen; antibody; BTV;  
 KW Bluetongue virus; foot and mouth disease virus; FMDV; influenza virus;  
 KW human immunodeficiency virus; HIV; protective immunity; epitope; TUB;  
 KW virus-derived tubule; anti-HIV; virucide.

XX Human immunodeficiency virus 1.  
 OS WO200226254-A2.  
 XX 04-APR-2002.

XX 27-SEP-2001; 2001WO-US030464.

XX 27-SEP-2000; 2000US-0235614P.

XX (UABR-) UAB RES FOUND.

XX Roy P;

XX WPI; 2002-339987/37.

XX A vaccine, for inducing an antiviral immune response, comprises a non-  
 PT replicating vaccine delivery vehicle (which comprises a non-infectious  
 PT recombinant viral tubule) carrying one or more immunogens.

XX Claim 8; Page 39; 65pp; English.

XX The present invention relates to a new vaccine comprising a non-  
 CC replicating vaccine delivery vehicle (which comprises a non-infectious  
 CC recombinant viral tubule) carrying one or more immunogens. The invention  
 CC is useful for inducing an immune response, preferably anti-viral, in a  
 CC subject. The administration of the vaccine is preferably followed by  
 CC administering one or more virus like particles carrying an immunogen. It  
 CC is also useful for administering to a patient for generating antibodies  
 CC specific for one or more immunogens, such as Bluetongue virus (BTV), foot  
 CC and mouth disease virus (FMDV), influenza virus and human  
 CC immunodeficiency virus (HIV). The invention provides an effective means  
 CC of delivering multiple peptide components representing viral/tumour  
 CC antigenic groups to elicit protective immunity, which has not previously  
 CC been possible. The present amino acid sequence represents one of a  
 CC collection (AAU96022-AAU96045) of HIV epitopes that were used in the  
 CC methods of the invention as immunogens. These epitopes were used to  
 CC construct chimeric NSI-TUBS (virus-derived tubules) which show  
 CC immunogenicity. (Updated on 29-AUG-2003 to standardise OS field)

XX Sequence 9 AA;

Query Match 100.0%; Score 39; DB 5; Length 9;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
 Db 2 RAFVTIGK 9

RESULT 9  
 ABG79839  
 ID ABG79839 standard; peptide; 9 AA.

XX AC ABG79839;  
 XX 15-NOV-2002 (first entry)  
 DT MHC class I molecule, viral epitope #87.

XX Major histocompatibility complex; MHC; MHC class I molecule; virus;  
 KW epitope; cytotoxic T lymphocyte response; CTL response; lymphatic system;  
 KW antigen; immunogenic; malignant tumour; carcinoma; melanoma; leukaemia;  
 KW lymphoma; infectious disease; hepatitis; malaria; measles; tuberculosis;  
 KW acquired immune deficiency syndrome; AIDS.

XX Human immunodeficiency virus.

XX WO200262368-A2.

XX 15-AUG-2002.

XX 22-JAN-2002; 2002WO-US002033.

XX 02-FEB-2001; 2001US-00776232.

XX (CTLI-) CTL IMMUNOTHERAPIES CORP.

XX Kundig TM, Simard JUL;

XX WPI; 2002-657506/70.

XX Inducing or sustaining immunological cytotoxic T lymphocyte response in a  
 PT mammal, useful for treating a mammal with malignant tumor or infectious  
 PT disease, by directly administering an antigen to the lymphatic system of  
 PT the mammal.

XX Disclosure; Page 20; 73pp; English.

XX The invention relates to a method of inducing and/or sustaining an  
 CC immunological cytotoxic T lymphocyte (CTL) response in a mammal  
 CC comprising administering directly to the lymphatic system of the mammal:  
 CC (a) an antigen in the form of a polypeptide; (b) a vector comprising a  
 CC nucleic acid encoding the antigen; or (c) a non-peptide antigen. The  
 CC method is useful for inducing and/or sustaining CTL response in a mammal.  
 CC This is particularly useful for treating a mammal having a malignant  
 CC tumour (e.g. carcinoma, melanoma, leukaemia or lymphoma) or infectious  
 CC disease (e.g. hepatitis, acquired immune deficiency syndrome (AIDS),  
 CC malaria, measles or tuberculosis), or in an animal having a  
 CC predisposition to these diseases. The mammal may be dogs, cats, mice,  
 CC cattle, sheep, pigs, goats, rabbits, or preferably humans. ABG79753-  
 CC ABG80319 represent viral epitopes on major histocompatibility complex  
 CC (MHC) class I molecules, used in the method of the invention

XX Sequence 9 AA;

Query Match 100.0%; Score 39; DB 5; Length 9;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
 Db 2 RAFVTIGK 9

```

RESULT 10
ADE79993
ID ADE79993 standard; peptide; 9 AA.
XX
XX
AC ADE79993;
XX
XX
DT 29-JAN-2004 (first entry)
XX
DE HIV1 carrier peptide to augment anti-malaria CD8+ T-cell immune response.
XX
XX antimalarial; cytostatic; vaccine; immune response;
KW non-hepadnaviral antigen; hepatitis B core particle; CD8+ T-cell;
KW epitope; poxvirus vector; cancer; malaria; epitope.
XX
OS Human immunodeficiency virus 1.
XX
PN WO2003066833-A2.
XX
PD 14-AUG-2003.
XX
PF 07-FEB-2003; 2003WO-US003897.
XX
XX
PR 08-FEB-2002; 2002US-0354963P.
XX
PA (UUNY-) UNIV NEW YORK MEDICAL CENT.
XX
PI Zavala F, Birkett AJ;
XX
XX WPI; 2003-748124/70.
DR
PT Generating an immune response against a non-hepadnaviral antigen in a
XX mammal, useful for treating or preventing cancer or malaria, by
PT administering a priming component comprising a recombinant hepatitis B
PT core particle.
XX
PS Disclosure; SEQ ID NO 49; 85pp; English.
XX
XX The invention relates to a method of generating an immune response
CC against a non-hepadnaviral antigen in a mammal by administering (to the
CC mammal) at least 1 dose of a priming component comprising a recombinant
CC hepatitis B core particle (rHEP) (which is a carrier for 1 or more non-
CC hepadnaviral CD8+ T-cell epitopes of the antigen). The method may be
CC supplemented by the use of a boosting stage comprising a non-replicating
CC or replication-impaired recombinant poxvirus vector. The method is useful
CC for generating an immune response against a non-hepadnaviral antigen in a
CC mammal for treating or preventing cancer or malaria. This sequence
CC represents a peptide from human immunodeficiency virus type 1 (HIV-1)
CC used as a carrier peptide to augment the immune response against a
CC Plasmodium peptide.
XX
XX Sequence 9 AA;
SQ
Query Match 100.0%; Score 39; DB 7; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.8e+06;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAPVTIGK 8
Db 2 RAPVTIGK 9
|||||||

RESULT 11
ADK50933
ID ADK50933 standard; peptide; 9 AA.
XX
XX
AC ADK50933;
XX
XX
DT 04-NOV-2004 (first entry)
XX
DE Breast/bladder carcinoma-related HLA-B*2705-binding peptide.
XX
XX C35 epitope; cytostatic; vaccine; tumour; breast; bladder carcinoma;
KW

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KW HLA-B*2705.
XX
OS Unidentified.
XX
PN WO2003104428-A2.
XX
XX
PD 18-DEC-2003.
XX
XX
PF 10-JUN-2003; 2003WO-US018252.
XX
XX
PR 10-JUN-2002; 2002US-0386738P.
XX
PR 11-DEC-2002; 2002US-0432241P.
XX
PR 23-APR-2003; 2003US-0464650P.
XX
XX (VACC-) VACCINEX INC.
XX (UYRP ) UNIV ROCHESTER.
XX
XX Zauderer M, Evans EE, Borrello MA;
XX
XX WPI; 2004-062349/06.
DR
XX
XX Novel C35 polypeptide useful for formulation of immunogenic composition
PT to induce antibodies and cell-mediated immunity against tumor cells.
XX
XX Example 12; Page 493; 626pp; English.
XX
XX The invention relates to a novel isolated polypeptide comprising or
CC consisting of two or more C35 peptide epitopes. The polypeptide of the
CC invention demonstrates cytostatic activity and may be useful for the
CC formulation of an immunogenic composition, such as a vaccine, to induce
CC antibodies and cell-mediated immunity against target cells such as tumour
CC cells. Furthermore, the polypeptide and its analogues may be useful as
CC prognostic markers for carcinoma, such as human breast or bladder
CC carcinoma. The current sequence is that of breast/bladder carcinoma-
CC related HLA-B*2705-binding peptide of the invention.
XX
XX Sequence 9 AA;
SQ
Query Match 100.0%; Score 39; DB 8; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.8e+06;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAPVTIGK 8
Db 2 RAPVTIGK 9
|||||||

RESULT 12
ADR69467
ID ADR69467 standard; peptide; 9 AA.
XX
XX
AC ADR69467;
XX
XX
DT 18-NOV-2004 (first entry)
XX
XX
DE Novel hybrid antigen-related peptide SeqID115.
XX
XX hybrid antigen; antigenic domain; infectious agent; tumour antigen;
KW binding domain; heat shock protein; antimicrobial; cytostatic; vaccine;
KW gene therapy; infectious disease; cancer; HLA-A2; binding peptide.
XX
XX Viruses.
OS
XX
XX WO2004071457-A2.
XX
XX
PD 26-AUG-2004.
XX
XX
PF 13-FEB-2004; 2004WO-US004340.
XX
XX
PR 13-FEB-2003; 2003US-0447142P.
XX
PR 11-APR-2003; 2003US-0462469P.
XX
PR 18-APR-2003; 2003US-0463746P.
XX
PR 16-SEP-2003; 2003US-0503417P.

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PR 12-FEB-2004; 2004US-00776521.  
 XX (MOJA-) MOJAVE THERAPEUTICS INC.  
 XX  
 XX Fletcher J, Prince-Cohane K, Mehra S, Slusarewicz P, Andjelic S;  
 PI Barber B;  
 XX WPI; 2004-625768/60.  
 XX  
 XX New hybrid antigens comprising an antigenic domain and improved heat  
 PT shock protein-binding domains, useful for preventing or treating  
 PT infectious diseases or cancer.  
 XX  
 XX Disclosure; SEQ ID NO 115; 56pp; English.  
 XX  
 XX This invention relates to a novel hybrid antigen which comprises at least  
 CC one antigenic domain of an infectious agent or tumour antigen and a  
 CC binding domain that non-covalently binds to a heat shock protein. The  
 CC invention may be useful for the production of compounds with an  
 CC antimicrobial or cytostatic activity. In addition, the invention may  
 CC prove useful for the production of a vaccine or for gene therapy. The  
 CC composition and methods disclosed are useful for preventing or treating  
 CC infectious diseases or cancer. The present sequence is that of a HLA-A2  
 CC binding peptide which was used in the exemplification of the invention.  
 XX  
 XX SQ Sequence 9 AA;  
 Query Match 100.0%; Score 39; DB 8; Length 9;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RAFVTICK 8  
 Db |||||  
 2 RAFVTICK 9  
 RESULT 13  
 AAW76840  
 ID AAW76840 standard; peptide; 10 AA.  
 XX  
 XX AAW76840;  
 XX  
 XX 25-JAN-1999 (first entry)  
 XX Fusion immunoglobulin heavy chain HIV gp120 B cell epitope #10.  
 DE B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IgH;  
 XX human immune deficiency virus; HIV; tolerance; treatment; therapy;  
 KW prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;  
 KW microbial infection; autoimmune disease; antibody; apoptosis;  
 KW antiviral T cell immunity.  
 XX Mus gp.  
 OS Homo sapiens.  
 XX WO9836087-A1.  
 XX  
 XX 20-AUG-1998.  
 XX  
 XX 13-FEB-1998; 98WO-US002766.  
 XX  
 XX 13-FEB-1997; 97US-0040581P.  
 XX (AMNA-) AMERICAN NAT RED CROSS.  
 XX Scott D, Zambidis E;  
 XX WPI; 1998-506315/43.  
 XX  
 XX New fusion immunoglobulin heavy chain including gp120 epitopes and  
 PT related complete antibodies - DNA, vectors and transformed cells, used to  
 PT induce tolerance to the epitopes for treatment of human immune deficiency  
 PT virus infection.

XX Claim 10; Page 119; 154pp; English.  
 XX  
 XX This sequence is an epitope used in the construction of a novel fusion  
 CC immunoglobulin heavy chain (IgH) protein with a mammalian, especially  
 CC human, IgH chain fused in frame at its N-terminus to one or more human  
 CC immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or  
 CC transfected cells are used to tolerate subjects to gp120 epitopes and to  
 CC maintain this tolerance, particularly for treatment of HIV infection.  
 CC optionally together with other therapeutic/prophylactic agents such as  
 CC vaccines, chemotherapeutic agents and immune response modifiers. Such  
 CC proteins can be used against other diseases where an immune response is  
 CC deleterious, e.g. microbial infection, tumours or autoimmune disease.  
 CC Induction of tolerance suppresses production of antibodies against gp120,  
 CC so prevents or inhibits 'bystander' apoptosis of uninfected T cells that  
 CC are bound to gp120 protein, maximising induction of protective antiviral  
 CC T cell immunity  
 XX  
 XX SQ Sequence 10 AA;  
 Query Match 100.0%; Score 39; DB 2; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 0.086;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RAFVTICK 8  
 Db |||||  
 2 RAFVTICK 9  
 RESULT 14  
 AAW19056  
 ID AAW19056 standard; peptide; 11 AA.  
 XX  
 XX AC AAW19056;  
 XX  
 XX 12-JAN-1998 (first entry)  
 XX Hypervariable region of HIV envelope glycoprotein.  
 DE  
 XX Hydrophilic; antigenic determinant; HIV; envelope; glycoprotein; env; gp;  
 KW recognition; B lymphocyte; type specific; antibody; vaccine; protection;  
 KW immune response; infection; neutralisation; hypervariable region.  
 XX Human immunodeficiency virus.  
 OS WO9714436-A1.  
 XX  
 XX 24-APR-1997.  
 XX  
 XX 18-OCT-1996; 96WO-US016911.  
 XX  
 XX 20-OCT-1995; 95US-00546515.  
 XX 09-FEB-1996; 96US-00599266.  
 XX (UYDU-) UNIV DUKE.  
 XX Haynes BF, Palker TJ;  
 XX WPI; 1997-244862/22.  
 XX  
 XX Synthetic human immunodeficiency virus vaccine - comprising hydrophilic  
 PT peptide corresponding to at least 1 antigenic determinant of envelope  
 PT glyco:protein recognised by B lymphocytes.  
 XX  
 XX Claim 14; Page 64; 104pp; English.  
 XX  
 XX An essentially pure hydrophilic peptide, comprising the SP-10 region of  
 CC the human immunodeficiency virus (HIV) envelope (env) glycoprotein (gp)  
 CC covalently linked to the present sequence and a carrier molecule, induces  
 CC the production of high titres of protective, type specific anti-HIV  
 CC antibodies (Ab) in a mammal. The peptide can be used in vaccines for  
 CC producing a protective immune response to HIV infection, while a HIV  
 CC neutralising Ab can be induced in a primate by administering a



CC composition comprising HIV env peptides that disrupt gp120/gp41

CC interactions  
XX.  
SQ Sequence 11 AA;  
Query Match 100.0%; Score 39; DB 2; Length 11;  
Best Local Similarity 100.0%; Pred. No. 0.095;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RAFVTICK 8  
| | | | |  
Db 1 RAFVTICK 8

RESULT 15  
AAW34472  
ID AAW34472 standard; peptide; 11 AA.  
XX  
AC AAW34472;  
XX 11-MAY-1998 (first entry)  
XX HIV gp120 V3 peptide.  
DE  
XX UDP-N-acetyl-alpha-D-galactosamine;  
KW polypeptide N-acetylgalactosaminyltransferase; GalNAc-t3; human;  
KW glycosylation; HIV gp120.  
XX  
OS Human immunodeficiency virus.  
XX  
FN WO9743405-A1.  
XX  
XX 20-NOV-1997.  
XX  
XX 15-MAY-1997; 97WO-DK000226.  
XX  
XX 15-MAY-1996; 96US-00648298.  
XX  
XX (CLAU/) CLAUSEN H.  
XX (BENN/) BENNETT E P.  
XX  
XX Clausen H, Bennett EP;  
PI WPI; 1998-008874/01.  
XX  
XX New isolated N-acetyl-galactosaminyl-transferase enzyme - used for the  
PT production of glycosylated polypeptide(s) having particular enzymatic,  
PT immunogenic or other biological or physical properties.  
XX  
XX Disclosure; Page 4; 70pp; English.  
XX  
XX This HIV-V3 peptide was used, together with a fibronectin peptide (see  
CC AAW34471), to demonstrate the acceptor substrate specificity of a novel  
CC human UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-  
CC acetylgalactosaminyltransferase (GalNAc-T3) (see AAW34470). GalNAc-T3 has  
CC a hitherto unknown acceptor substrate specificity exemplified by its  
CC ability to glycosylate these peptides. The enzyme initiates O-  
CC glycosylation of specific serine and threonine in proteins by adding N-  
CC acetylgalactosamine to the hydroxy group of these amino acids. It is used  
CC in claimed methods for the glycosylation of peptides and proteins and for  
CC producing vaccines by modifying the O-glycosylation pattern of eukaryotic  
XX cells  
XX  
SQ Sequence 11 AA;  
Query Match 100.0%; Score 39; DB 2; Length 11;  
Best Local Similarity 100.0%; Pred. No. 0.095;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RAFVTICK 8  
| | | | |  
Db 2 RAFVTICK 9

RESULT 16  
AAW62152  
ID AAW62152 standard; peptide; 12 AA.  
XX  
AC AAW62152;  
XX 27-AUG-2003 (revised)  
DT 25-MAR-2003 (revised)  
DT 02-MAY-1995 (first entry)  
XX  
DE HIV-1 gp120/41 protein consensus binding sequence.  
XX  
XX Small ribonucleoprotein complex; UI snRNP; 70K protein; epitope;  
KW autoantibody; immunoinfective cluster virus; nuclear protein antigen;  
KW systemic lupus erythematosus; human immunodeficiency virus; HIV-1;  
KW systemic lupus erythematosus; mixed connective tissue disease;  
KW scleroderma; glycoprotein 120; glycoprotein 41.  
XX  
OS Human immunodeficiency virus 1.  
XX  
FN WO9420141-A1.  
XX  
XX 15-SEP-1994.  
XX  
XX 10-MAR-1994; 94WO-US002631.  
XX  
XX 11-MAR-1993; 93US-00029850.  
XX  
XX (UYSC-) UNIV SOUTHERN CALIFORNIA.  
XX  
XX Douvas A, Takehana Y, Ehresmann G;  
PI WPI; 1994-302689/37.  
XX  
XX Methods for treating immunoinfective cluster virus infections - utilise  
PT antibodies or fragments characteristic of auto antibodies produced by  
PT patients with rheumatic disorders.  
XX  
XX Disclosure; Page 56; 106pp; English.  
XX  
XX The UI snRNP is the target of high-titre, high avidity autoantibodies  
CC occurring in the systemic rheumatoid disorders of mixed connective tissue  
CC disease, scleroderma and systemic lupus erythematosus. It has been found  
CC that some sites in the UI snRNP 70K protein (see AAW62120-R62135) are  
CC homologous to sites in HIV-1 gp120/41 (AAW62136-R62152) and that anti-RNP  
CC autoantibodies can be used to neutralise HIV-1. In particular, the  
CC sequence AAW62152 from HIV-1 gp120 matches a consensus binding sequence  
CC which is necessary and sufficient for high affinity binding to UI RNA.  
CC (Updated on 25-MAR-2003 to correct PN field.) (Updated on 27-AUG-2003 to  
CC correct OS field.)  
XX  
SQ Sequence 12 AA;  
Query Match 100.0%; Score 39; DB 2; Length 12;  
Best Local Similarity 100.0%; Pred. No. 0.1;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RAFVTICK 8  
| | | | |  
Db 5 RAFVTICK 12

RESULT 17  
AAW54932  
ID AAW54932 standard; peptide; 12 AA.  
XX  
AC AAW54932;  
XX  
DT 25-SEP-1998 (first entry)  
XX  
XX HIV gp120 envelope protein, peptide 127, analogue 267d.  
XX

KW Immunoadsorbent; immunoassay; HIV gp120; immunogen, antibody; Human.  
 XX Human immunodeficiency virus.  
 XX US5763160-A.  
 XX 09-JUN-1998.  
 XX 07-JUN-1995; 95US-00488252.  
 XX 12-FEB-1988; 88US-00155321.  
 XX 01-MAR-1991; 91US-00663262.  
 XX 09-JUL-1991; 91US-00726605.  
 XX 19-OCT-1994; 94US-00326676.  
 XX (UNBI-) UNITED BIOMEDICAL INC.  
 XX Wang CY;  
 XX WPI; 1998-347301/30.  
 XX HIV gp120 peptides - useful as immunoassay reagents or vaccine components.  
 XX Example 8; Column 21/22; 34pp; English.  
 XX Peptides AAW54903-W54941 can be used as an immunoabsorbent in an immunoassay for detecting antibodies to HIV gp120, or as an immunogen for eliciting antibodies to HIV in a mammal  
 XX Sequence 12 AA;  
 SQ

Query Match 100.0%; Score 39; DB 2; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 0.1;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFPVTIGK 8  
 |||||  
 Db 5 RAFPVTIGK 12

RESULT 18  
 AAW22327  
 ID AAW22327 standard; peptide; 13 AA.  
 XX AC AAW22327;  
 XX 17-OCT-2003 (revised)  
 XX 18-SEP-1997 (first entry)  
 XX HIV-1 strain IIIB gp120 V3 loop peptide.  
 XX Epitope; human immunodeficiency virus type 1; HIV-1; gp120; gp160;  
 XX monoclonal antibody; V3 loop; immunisation; mouse; splenocyte; hybridoma;  
 XX membrane fraction; passive immunisation; human.  
 XX Human immunodeficiency virus 1.  
 XX US5618922-A.  
 XX 08-APR-1997.  
 XX 25-JUL-1994; 94US-00279906.  
 XX 25-JUL-1994; 94US-00279906.  
 XX (NISP) NISSIN SHOKUHIN KAISHA LTD.  
 XX Yoneda Y, Ohno T, Terada M;  
 XX WPI; 1997-225475/20.  
 XX Monoclonal antibody specific for human immunodeficiency virus type 1 MN

PT strain - for passive immunisation against infection.  
 XX Example 3; Col 10; 14pp; English.  
 XX The invention relates to a novel monoclonal antibody (MAB) NM03 which binds to epitopes from the human immunodeficiency virus type 1 (HIV-1). The antibody was raised conventionally by immunising Balb/c mice with purified live HIV-1 MN, then isolating splenocytes and fusing them to P3-X63-Ag8-UI cells. Hybridomas were then screened with membrane fractions from infected and non-infected H9 cells. The MAB was observed to bind to a protein band of 120 kD on a Western blot of separated, denatured HIV-1 proteins. This binding was shown to be between residues 320-327 by epitope mapping by ELISA and competitive binding. The ability of the MAB to inhibit infection of cells by HIV-1 shown by infecting H9 cells with live strains of HIV-1 and testing infection by a p24 assay. This peptide sequence represents the V3 loop region from HIV-1 strain IIIB, where the MAB NM03 binds. The MAB can be used for the passive immunisation of humans susceptible to, or infected with HIV-1. (Updated on 17-OCT-2003 to standardise OS field)  
 XX Sequence 13 AA;  
 SQ

Query Match 100.0%; Score 39; DB 2; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 0.11;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFPVTIGK 8  
 |||||  
 Db 6 RAFPVTIGK 13

RESULT 19  
 AAW62890  
 ID AAW62890 standard; peptide; 13 AA.  
 XX AC AAW62890;  
 XX 30-SEP-1998 (first entry)  
 XX Peptide sequence of the specification.  
 XX Monoclonal antibody; HIV-1gp120; gp160; infection; H9 cell;  
 XX HIV strain MN; treatment; human HIV infection.  
 XX Synthetic.  
 XX JP10182489-A.  
 XX 07-JUL-1998.  
 XX 25-DEC-1996; 96JP-00344904.  
 XX 25-DEC-1996; 96JP-00344904.  
 XX (NISP) NISSIN SHOKUHIN KAISHA LTD.  
 XX WPI; 1998-433774/37.  
 XX Monoclonal antibody which binds to HIV-1gp120 or gp160 - used to prevent and treat human HIV infection.  
 XX Example 3; Page 8; 12pp; Japanese.  
 XX AAW62889-900 represent peptides used to identify a peptide sequence (AAW62874) present in HIV-1gp120 or gp160 which is bound by the monoclonal antibody of the invention. The antibody neutralises in vitro the infection of H9 cell by an active HIV strain MN according to the p24 analytical method. The antibody is used for treatment of human HIV infection  
 XX Sequence 13 AA;  
 SQ

Query Match 100.0%; Score 39; DB 2; Length 13;

Best Local Similarity 100.0%; Pred. No. 0.11; Mismatches 0; Indels 0; Gaps 0;  
Matches 8; Conservative 0

QY 1 RAFVTIGK 8  
Db 6 RAFVTIGK 13

## RESULT 20

AAW99433  
ID AAW99433 standard; peptide; 13 AA.

XX AAW99433;

XX 11-SEP-2003 (revised)

DT 07-DEC-2001 (first entry)

DE Vaccine related MHC ligand peptide SEQ ID NO:536.

XX Glutamic acid; glutamine; vaccine; major histocompatibility complex; MHC;  
KW immunomodulator; antiallergic; endocrine; neuroprotectant; virucidal;  
KW bactericidal; antiparasitic; fungicidal; cytostatic; medicine;  
KW pharmaceutical; immune disorder; immune deficiency; autoimmune;  
KW hypersensitivity; allergy; graft rejection; infection; hormonal disorder;  
KW central nervous system disease; cancer; melanoma; anti-melanoma vaccine;  
KW human immunodeficiency virus.

XX Human immunodeficiency virus 1.

XX WO20017072-A2.

PN 27-SEP-2001.

XX 22-MAR-2001; 2001WO-PR000872.

XX 23-MAR-2000; 2000FR-00003711.

PR (FABR ) FABRE MEDICAMENT SA PIERRE.

XX Klinguer-Hamour C, Corvaia N, Beck A, Goetsch L;

XX WPI; 2001-611470/70.

XX Stabilized pharmaceutical containing N-terminal glutamic acid or  
PT glutamine, useful e.g. in anti-melanoma vaccines, is an addition salt  
PT with strong acid.

XX Claim 9; Page 122; 149pp; French.

XX The present invention describes a pharmaceutical compound (I) that  
CC contains an N-terminal glutamic acid (Glu) or glutamine (Gln) residue in  
CC the form of an addition salt with a strong, physiologically acceptable  
CC acid (II). Also described are: (a) a pharmaceutical composition  
CC containing at least one (I); (b) a vaccine containing at least one (I)  
CC where this is a major histocompatibility complex (MHC) ligand (Ia); (c) a  
CC method for in vitro diagnosis of diseases associated with the presence of  
CC (Ia); (d) a kit for method (c) that includes a (Ia); and (e) a process  
CC for preparing (I). (I) has immunomodulator, endocrine, antiallergic,  
CC neuroprotectant, virucidal, bactericidal, antiparasitic, fungicidal and  
CC cytostatic activities. (I) are useful, in human or veterinary medicine,  
CC in pharmaceutical compositions (for treating immune disorders, e.g.  
CC immune deficiency, autoimmune states, hypersensitivity, allergy, graft  
CC rejection, infection, hormonal disorders and central nervous system  
CC diseases), also, where (I) is a MHC ligand (Ia), in vaccines for  
CC treatment or prevention of: (i) viral, bacterial, parasitic or fungal  
CC infections; or (ii) of cancers. A particular application is in anti-  
CC melanoma vaccines. (I) are also useful for in vitro diagnosis of diseases  
CC associated with interactions between MHC and (I), e.g. melanoma and human  
CC immunodeficiency virus infection. AAW99898 to AAW99592 represent peptides  
CC which can be used in pharmaceutical compounds from the present invention.  
CC (Updated on 11-SEP-2003 to standardise OS field)

XX Sequence 13 AA;

Query Match 100.0%; Score 39; DB 4; Length 13;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
Db 6 RAFVTIGK 13

## RESULT 21

AAW33336  
ID AAW33336 standard; peptide; 14 AA.

XX AAW33336;

XX 25-MAR-2003 (revised)

DT 06-JUL-1993 (first entry)

DE Sequence of peptide which corresp. to the V3 loop region of gp120 of HIV-  
DE 1 isolate IIIB.

XX Monoclonal antibody; NM-01; HIV-1; gp120; gp160.

XX Synthetic.

XX WO9304090-A1.

XX 04-MAR-1993.

XX 24-AUG-1992; 92WO-US007111.

XX 22-AUG-1991; 91US-00748562.

XX (NISP ) NISSIN SHOKUHIN KAISHA LTD.

XX Ohno T;

XX WPI; 1993-093943/11.

XX Monoclonal antibodies against HIV-1 gp120 and gp160 proteins - for  
PT treating and preventing HIV-1 infection.

XX Example; Page 20; 57pp; English.

XX NM-01 is a monoclonal antibody. In order to characterize the viral  
CC epitope recognized by NM-01, the antibody was screened by ELISA for  
CC reactivity with overlapping peptides corresp. to the amino acid sequence  
CC of the V3 loop region of HIV-1 gp120 (AAW33332, AAW33333, AAW33334).  
CC While there was no detectable reactivity over background of Mab-01 with  
CC the peptides corresp. to AAs 302-316 or 322-336 of the V3 loop, binding  
CC of the antibody to the peptide representing AAs 312-326 was apparent.  
CC The extent of this reactivity with other HIV-1 isolates was screened with  
CC peptides corresp. to the V3 loop region of HIV-1 isolates IIIB, RF, CDC4,  
CC NY/5, Z6, Z2 and ELI (AAW33335-R33342). These results indicate that  
CC monoclonal antibody NM-01 recognizes an epitope of the V3 loop of gp120  
CC of multiple HIV-1 isolates having the amino acid sequence AAW33343. NM-01  
CC is also putatively reactive with the RF-like peptide set out in AAW33344.  
CC The variable region of the heavy and light chain of monoclonal antibody  
CC NM-01 were cloned by PCR and sequenced. Nucleotides 1-21 and 334-363 of  
CC AAQ37472 corresp. to the PCR primers used to amplify NM-01 light chain  
CC sequences and nucleotides 1-27 and 385-402 of AAQ57471 corresp. to the  
CC PCR primers used to amplify NM-01 heavy chain sequences. (Updated on 25-  
CC MAR-2003 to correct PN field.)

XX Sequence 14 AA;

Query Match 100.0%; Score 39; DB 2; Length 14;  
Best Local Similarity 100.0%; Pred. No. 0.12;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
Db 6 RAFVTIGK 13



KW cluster peptide; principal neutralising determinant.  
 XX Synthetic.  
 OS  
 XX  
 PN WO9426785-A1.  
 XX  
 XX 24-NOV-1994.  
 PD  
 XX  
 XX 13-MAY-1994; 94WO-US005142.  
 PF  
 XX  
 XX 14-MAY-1993; 93US-00060988.  
 PR  
 XX  
 XX (USSH ) US SEC DEPT HEALTH.  
 PA  
 XX Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
 PI  
 XX WPI; 1995-006707/01.  
 XX  
 XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 XX  
 XX Example 1; Page 33; 120pp; English.  
 PS  
 XX Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC in the HIV-1 IIRB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCLUS 3-18 and PCLUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substd. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRAF). In peptide 18-2, the Ile residue at  
 CC position 2 in peptide 18 has been deleted. (Updated on 25-MAR-2003 to  
 CC correct PN field.)  
 XX  
 XX Sequence 14 AA;  
 SQ Query Match 100.0%; Score 39; DB 2; Length 14;  
 Best Local Similarity 100.0%; Pred. No. 0.12; Mismatches 0; Gaps 0;  
 Matches 8; Conservative 0; Indels 0; Indels 0; Gaps 0;  
 QY 1 RAFVTIGK 8  
 DB |||||  
 7 RAFVTIGK 14  
 DE  
 XX  
 RESULT 25  
 AAW09264  
 ID AAW09264 standard; peptide; 14 AA.  
 XX  
 XX AAW09264;  
 AC  
 XX 25-MAR-2003 (revised)  
 DT 03-MAR-1997 (first entry)  
 XX  
 XX HIV-1 strain IIRB gp120 V3 loop peptide.  
 DE  
 XX Human immunodeficiency virus type-1; HIV-1; gp120; epitope;  
 KW monoclonal antibody; infection; heavy chain; light chain; hybridoma;  
 KW complementarity determining region; CDR; V3 loop.  
 XX  
 XX Synthetic.  
 OS  
 XX US555865-A.  
 PN  
 XX 24-SEP-1996.  
 PD  
 XX 24-AUG-1993; 93US-00111080.  
 PF  
 XX 22-AUG-1991; 91US-00748562.  
 PR 24-AUG-1992; 92WO-US007111.  
 PR

PR 22-APR-1993; 93US-00039457.  
 XX  
 PA (NISP ) NISSIN SHOKUHIN KAISHA LTD.  
 XX  
 PI Ohno T;  
 XX  
 XX WPI; 1996-442363/44.  
 DR  
 XX New monoclonal antibodies to HIV-1 - used for the prevention, treatment  
 PT or diagnosis of HIV-1 infection.  
 XX  
 XX Example 2; Col 11; 56pp; English.  
 PS  
 XX The invention relates to a novel monoclonal antibody designated NM-01.  
 CC The antibody was raised by immunising 2-month old Balb/c mice with live  
 CC HIV-1 strain MN. Splenocytes from the mice were fused to P3-X63-Ag8-U1  
 CC cells (ATCC CRL1597). Hybridomas were screened using membranes from non-  
 CC infected and MN-infected H9 cells, by reacting with hybridoma culture  
 CC supernatants. This screening was followed by immunofluorescence and  
 CC radioimmunoassays. The screening isolated the hybridoma HB 10726 which  
 CC secretes the antibody NM-01. The peptides AAW09263-72 are derived from  
 CC other HIV strains and were used to determine which other HIV-1 isolates  
 CC antibody NM-01 reacted with. This peptide is from HIV-1 strain IIRB. The  
 CC antibody is used for the diagnosis of HIV-1 in a fluid e.g. blood, and  
 CC can be used to treat or prevent an HIV-1 infection. (Updated on 25-MAR-  
 CC 2003 to correct PF field.)  
 XX  
 XX Sequence 14 AA;  
 SQ Query Match 100.0%; Score 39; DB 2; Length 14;  
 Best Local Similarity 100.0%; Pred. No. 0.12; Mismatches 0; Gaps 0;  
 Matches 8; Conservative 0; Indels 0; Indels 0; Gaps 0;  
 QY 1 RAFVTIGK 8  
 DB |||||  
 7 RAFVTIGK 14  
 DE  
 XX  
 RESULT 26  
 AAW76864  
 ID AAW76864 standard; peptide; 14 AA.  
 XX  
 XX AAW76864;  
 AC  
 XX 25-JAN-1999 (first entry)  
 DT  
 XX Fusion immunoglobulin heavy chain HIV gp120 B cell epitope #34.  
 DE  
 XX B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IgH;  
 KW human immune deficiency virus; HIV; tolerance; treatment; therapy;  
 KW prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;  
 KW microbial infection; autoimmune disease; antibody; apoptosis;  
 KW antiviral T cell immunity.  
 XX  
 XX Mus sp.  
 OS Homo sapiens.  
 OS  
 XX WO9836087-A1.  
 PN  
 XX 20-AUG-1998.  
 PD  
 XX 13-FEB-1998; 98WO-US002766.  
 PF  
 XX 13-FEB-1997; 97US-0040581P.  
 PR  
 XX (AMNA-) AMERICAN NAT RED CROSS.  
 PA  
 XX Scott D, Zambidis E;  
 PI  
 XX WPI; 1998-506315/43.  
 DR  
 XX New fusion immunoglobulin heavy chain including gp120 epitopes and  
 PT related complete antibodies - DNA, vectors and transformed cells, used to

PT induce tolerance to the epitopes for treatment of human immune deficiency  
 PT virus infection.

PS Claim 10; Page 119; 154pp; English.

XX  
 CC This sequence is an epitope used in the construction of a novel fusion  
 CC immunoglobulin heavy chain (IGH) protein with a mammalian, especially  
 CC human, IGH chain fused in frame at its N-terminus to one or more human  
 CC immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or  
 CC transfectected cells are used to tolerate subjects to gp120 epitopes and to  
 CC maintain this tolerance, particularly for treatment of HIV infection,  
 CC optionally together with other therapeutic/prophylactic agents such as  
 CC vaccines, chemotherapeutic agents and immune response modifiers. Such  
 CC proteins can be used against other diseases where an immune response is  
 CC deleterious, e.g. microbial infection, tumours or autoimmune disease.  
 CC Induction of tolerance suppresses production of antibodies against gp120,  
 CC so prevents or inhibits 'bystander' apoptosis of uninfected T cells that  
 CC are bound to gp120 protein, maximising induction of protective antiviral  
 CC T cell immunity

XX SQ Sequence 14 AA;

Query Match 100.0%; Score 39; DB 2; Length 14;  
 Best Local Similarity 100.0%; Pred. No. 0.12; Indels 0; Gaps 0;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
 |||||  
 Db 5 RAFVTIGK 12

RESULT 27

AAP82095  
 ID AAP82095 standard; peptide; 15 AA.

XX AC AAP82095;

XX 25-MAR-2003 (revised)  
 DT 17-DEC-2001 (revised)  
 DT 29-OCT-1990 (first entry)

XX Env-K1 peptide.

XX Env-K1; gp160 Env protein; T-cell cytotoxicity; HIV.

XX Synthetic.

XX USN7148692-N.

XX 02-AUG-1988.

XX 26-JAN-1988; 88US-00148692.

XX 26-JAN-1988; 88US-00148692.

XX (USSH ) US DEPT HEALTH & HUMAN SERVICE.

XX (USDC ) US SEC OF COMMERCE.

XX Berzofsky J, Takahashi H, Hosmalin A, Germain R, Moss B;

XX WPI; 1988-264280/37.

XX Synthetic peptide corresp. to HIV GP 160 ENV sequence - which elicits  
 PT cytotoxicity by T cells against HIV and proliferation of HIV-specific  
 PT cytotoxic T cells.

XX Disclosure; Page ?; 31pp; English.

XX This peptide elicits cytotoxicity by T-cells against HIV antigens and  
 CC stimulates prodn. of HIV-specific cytotoxic T-lymphocytes (CTLs). It is  
 CC specific for the HIV envelope protein gp160. (Note: Revised entry  
 CC submitted to correct the patent number format of US Government-owned NTIS  
 CC applications to prevent clashes with ongoing US granted patent numbers.

CC For further information please visit the Derwent web site at  
 CC www.derwent.com/dwpi/updates/ntis\_us.html.) (Updated on 25-MAR-2003 to  
 CC correct PF field.) (Updated on 25-MAR-2003 to correct PA field.)

XX SQ Sequence 15 AA;

Query Match 100.0%; Score 39; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.13; Indels 0; Gaps 0;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
 |||||  
 Db 8 RAFVTIGK 15

RESULT 28

AAP91228  
 ID AAP91228 standard; peptide; 15 AA.

XX AC AAP91228;

XX 24-OCT-2003 (revised)  
 DT 27-AUG-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 13-AUG-1990 (first entry)

XX Peptide comprising AAs 308-322 of HIV-1 IIIB env protein.

XX AIDS; HIV-I; vaccine.

XX Human immunodeficiency virus 1.

XX EP339504-A.

XX 02-NOV-1989.

XX 21-APR-1989; 89EP-00107197.

XX 26-APR-1988; 88US-00186333.

XX 20-MAR-1989; 89US-00324027.

XX (DUPO ) DU PONT DE NEMOURS & CO E I.

XX (DUPO ) DU PONT MERCK PHARMACEUTICAL CO.

XX Kenealy WR, Fetteaway SR, Durda PJ;

XX WPI; 1989-317386/44.

XX Synthetic human immuno-deficiency virus env-coded peptide(s) - induce  
 PT antibodies that block human immuno-deficiency virus proliferation and  
 PT fusion between infected and non-infected cells.

XX Claim 3; Page 21; 24pp; English.

XX Peptide will induce an immune response in subject, and will thus act as a  
 CC non-infective vaccine, prophylactic or have therapeutic value for AIDS  
 CC patients. (Updated on 25-MAR-2003 to correct PA field.) (Updated on 27-  
 CC AUG-2003 to correct OS field.) (Updated on 24-OCT-2003 to standardise OS  
 CC field)

XX SQ Sequence 15 AA;

Query Match 100.0%; Score 39; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.13;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
 |||||  
 Db 8 RAFVTIGK 15

RESULT 29

AAR06294

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ID  AAR06294 standard; protein; 15 AA.
XX  AC
XX  AAR06294;
XX  DT
XX  24-OCT-2003 (revised)
XX  DT 17-DEC-1990 (first entry)
XX  DE
XX  Peptide derived from HIV-1 gp 120 envelope glycoprotein.
XX  KW AIDS; vaccine; T-cell proliferation; keyhole limpet haemocyanin.
XX  OS
XX  Human immunodeficiency virus 1.
XX  PN US4943628-A.
XX  PD 24-JUL-1990.
XX  PF 13-JUN-1988; 88US-00205983.
XX  PR 13-JUN-1988; 88US-00205983.
XX  PA (ORTH ) ORTHO PHARM CORP.
XX  PI Rosen JI, Warner JF;
XX  DR WPI; 1990-246652/32.
XX  PT Peptide(s) derived from HIV-1 - stimulate T-cell proliferation, etc.
XX  PT useful in immunisation against HIV.
XX  PS Claim 1; Page 13; 13pp; English.
XX  CC Peptide is a fragment of HIV-1 gp 120 glyco-protein, useful in providing
XX  CC vaccines, preferably operatively linked to an immunogenic carrier eg.
XX  CC keyhole limpet haemocyanin, HSA, tetanus toxoid etc. (Updated on 24-OCT-
XX  CC 2003 to standardise OS field)
XX  SQ Sequence 15 AA;
    Query Match 100.0%; Score 39; DB 2; Length 15;
    Best Local Similarity 100.0%; Pred. No. 0.13;
    Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
    QY 1 RAFVTIGK 8
    Db 2 RAFVTIGK 9
    AC
    AC AAR21343 standard; protein; 15 AA.
    XX
    XX AAR21343;
    XX
    XX 25-MAR-2003 (revised)
    DT 16-MAY-1992 (first entry)
    XX
    XX HIV-1 gp120 epitope found in mouse immunoglobulin BAT123 and mouse/human
    DE chimeric antibody CAG1-51-4.
    XX
    XX Chimeric immunoglobulin; viral-neutralising; HIV-1;
    KW BAT123 mouse immunoglobulin; viral antigen-binding region; immunotherapy;
    KW AIDS; ARC; ss.
    XX
    XX Human immunodeficiency virus 1.
    OS
    XX WO201719-A.
    PN
    XX 06-FEB-1992.
    PD
    XX 18-JUL-1990; 90WO-US004048.
    PF
    XX 18-JUL-1990; 90WO-US004048.
    PR
  
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XX  (TANO-) TANOX BIOSYST INC.
XX  PA
XX  PI Liov RS, Rosen EM, Sun BN, Fung MS, Chang TW, Chang NT;
XX  XX
XX  DR WPI; 1992-064897/08.
XX  FT
XX  New chimeric HIV-1-neutralising immunoglobulin(s) - comprising non-human
XX  PT antigen binding regions and constant human region, for immuno-therapy of
XX  PT AIDS and ARC.
XX  PS
XX  Example; Page 26; 39pp; English.
XX  CC
XX  The inventors claim a chimeric, viral-neutralising immunoglobulin which
XX  CC binds to the gp120 region of HIV-1 with a potency and immunologic
XX  CC specificity equal to BAT123 mouse Ig. It comprises a viral-specific
XX  CC antigen-binding region of non-human origin and a constant region of
XX  CC human origin. Specifically claimed is the chimeric immunoglobulin CGP
XX  CC 47439. Probes V-kappa-1 and V-kappa-2 (AAQ21497, AAQ21498) were used to
XX  CC screen a genomic DNA library for BAT123 cells for the functionally
XX  CC rearranged variable region gene of BAT123 light chain (VL). The
XX  CC identified clone, V-kappa-123-23, was used in the subsequent construction
XX  CC of the mouse/human chimeric L chain gene. Probe VH-1 was used to screen
XX  CC partial genomic libraries for the functionally rearranged variable region
XX  CC genes for BAT123 heavy chain (VH). Clone VH-123-E3 hybridised with the
XX  CC chimeric H chain gene. This clone was used in the construction of the mouse-human
XX  CC chimeric H chain gene. The chimeric antibody CAG1-51-4 was found to bind
XX  CC to the same oligopeptide (AAR21343) as BAT123 which indicates that the
XX  CC antigen specificity of the murine antibody BAT123 was preserved upon
XX  CC conversion into a mouse/human chimeric antibody. (Updated on 25-MAR-2003
XX  CC to correct PR field.)
XX  SQ Sequence 15 AA;
    Query Match 100.0%; Score 39; DB 2; Length 15;
    Best Local Similarity 100.0%; Pred. No. 0.13;
    Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
    QY 1 RAFVTIGK 8
    Db 8 RAFVTIGK 15
    AC
    AC AAR38187 standard; peptide; 15 AA.
    XX
    XX AAR38187;
    XX
    XX 27-AUG-2003 (revised)
    DT 25-MAR-2003 (revised)
    DT 12-OCT-1993 (first entry)
    XX
    XX V3 loop peptide D44 (R15K).
    DE
    XX gp120; HIV-1; cytotoxic T-lymphocyte; CTL; T-helper; AIDS; infection.
    KW
    XX Human immunodeficiency virus 1.
    OS
    XX WO9310816-A1.
    PN
    XX 10-JUN-1993.
    PD
    XX 02-DEC-1992; 92WO-US010378.
    PF
    XX 02-DEC-1991; 91US-00800932.
    PR 16-SEP-1992; 92US-00945865.
    XX
    XX (TEXA ) UNIV TEXAS SYSTEM.
    PA
    XX Sastry JK, Arlinghaus RB, Plattsoucas CD, Nehete PN;
    PI WPI; 1993-196739/24.
    XX
    XX
  
```

XX Peptide composition for treating and preventing viral infections -  
PT comprise CTL-inducing epitope and HIV infection-inhibiting sequence or T  
PT helper cell-inducing sequence.  
XX  
XX Claim 13 + 19; Page 94-95; 130pp; English.  
XX  
CC HIV gp120 V3 loop-derived peptides (AAR38170-87) are successful in  
CC generating CTL responses, esp. peptide R15K (AAR38187); the T-helper cell  
CC -inducing peptide includes the sequence C19A (AAR38184); HIV infection-  
CC inhibiting peptides are given in AAR38188-206, and are esp. peptides  
CC R15K, N24G, E13V, R8K, T13Q and H13N (AAR38165-69). The peptides may also  
CC be derived from an influenza virus protein or a sendai virus protein  
CC (AAR41014-15). It was observed that peptide R15K (amino acids 315-329),  
CC with sequences derived from the V3 loop of HIV-1 IIIB, inhibits HIV-1,  
CC infection of primary human T cells by 92% at 1 microg/ml (ca. 0.4-0.6  
CC microm). (Updated on 25-MAR-2003 to correct PN field.) (Updated on 27-AUG  
CC -2003 to correct OS field.)  
XX  
XX Sequence 15 AA;  
XX  
XX Query Match 100.0%; Score 39; DB 2; Length 15;  
XX Best Local Similarity 100.0%; Pred. No. 0.13;  
XX Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX QY 1 RAFVTIGK 8  
XX |||||  
XX Db 8 RAFVTIGK 15  
XX  
XX  
XX RESULT 32  
XX AAR32207  
XX ID AAR32207 standard; peptide; 15 AA.  
XX  
XX AC AAR32207;  
XX  
XX DT 24-OCT-2003 (revised)  
XX DT 17-DEC-2001 (revised)  
XX DT 07-JUN-1993 (first entry)  
XX  
XX DE Sequence of peptide which corresp.to AA residues 315-329 of the V3 loop  
XX of the gp160 envelope glycoprotein in HIV-1 strain MN.  
XX  
XX DE V3 loop; envelope glycoprotein; gp160; HIV-1; prophylaxis; immunotherapy.  
XX  
XX KW Human immunodeficiency virus; (HIV-1) isolate IIIB.  
XX OS  
XX USN7760530-N.  
XX PN  
XX PD 15-DEC-1992.  
XX  
XX PF 18-SEP-1991; 91US-00760530.  
XX  
XX PR 18-SEP-1991; 91US-00760530.  
XX  
XX PA (USSH ) US DEPT HEALTH & HUMAN SERVICE.  
XX  
XX PI Berzofsky JA, Takahashi H, Germain RN;  
XX WPI; 1993-058406/07.  
XX  
XX DR  
XX  
XX PT Peptide(s) corresponding to the V3 loop of gp=160 of HIV-1 - elicit  
XX cytotoxic T lymphocyte(s) active against broad range of HIV-1 isolate(s).  
XX  
XX PS Example; Page 19; 41pp; English.  
XX  
XX CC The peptide corresponds to amino acid residues numbered 315-329 in the V3  
XX loop of the envelope glycoprotein gp160 of human immunodeficiency virus  
XX (HIV-1), as numbered by Ratner in the strain MN. It is useful for the  
XX prophylaxis or immunotherapy of HIV-1 infection. It elicits an immunised  
XX subject cytotoxic T lymphocyte (CTL) activity against the corres.  
XX clinical isolate of HIV-1. (Note: Revised entry submitted to correct the  
XX patent number format of US Government-owned NTIS applications to prevent

CC clashes with ongoing US granted patent numbers. For further information  
CC please visit the Derwent web site at  
CC www.derwent.com/dwpi/updates/ntis\_us.html.) (Updated on 24-OCT-2003 to  
CC standardise OS field)  
XX  
XX SQ Sequence 15 AA;  
XX  
XX Query Match 100.0%; Score 39; DB 2; Length 15;  
XX Best Local Similarity 100.0%; Pred. No. 0.13;  
XX Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX QY 1 RAFVTIGK 8  
XX |||||  
XX Db 8 RAFVTIGK 15  
XX  
XX  
XX RESULT 33  
XX AAR51619  
XX ID AAR51619 standard; protein; 15 AA.  
XX  
XX AC AAR51619;  
XX  
XX DT 27-AUG-2003 (revised)  
XX DT 25-MAR-2003 (revised)  
XX DT 21-OCT-1994 (first entry)  
XX  
XX DE V3 loop region of gp120 of HIV.  
XX  
XX KW GP 120; HIV epitope; Human Immunodeficiency Virus fusion polypeptide.  
XX OS  
XX PN Human immunodeficiency virus.  
XX WO9406469-A1.  
XX  
XX PD 31-MAR-1994.  
XX  
XX PF 18-SEP-1992; 92WO-US007966.  
XX  
XX PR 18-SEP-1992; 92WO-US007966.  
XX  
XX PA (LJOL-) LA JOLLA INST ALLERGY & IMMUNOLOGY.  
XX  
XX PI Altman A, Baier GJ;  
XX WPI; 1994-118166/14.  
XX  
XX DR  
XX PT New fusion polypeptide of antigen binding domain and HIV epitope - useful  
XX as vaccine for treatment or prevention of HIV infection, ensures  
XX PT efficient focusing of epitopes on surface of antigen presenting cells.  
XX  
XX PS Example 1; Page 24; 39pp; English.  
XX  
XX CC AAR51619 shows a region of the V3 loop (residues 315-329) of the envelope  
XX glycoprotein, gp120, of HIV-1. It represents an epitope which forms part  
XX of a hybrid-fusion polypeptide with a Fab fragment of an IGG Fab  
XX fragment. The polypeptide is capable of presenting the epitope to antigen  
XX presenting cells. (Updated on 25-MAR-2003 to correct PN field.) (Updated  
XX on 27-AUG-2003 to correct OS field.)  
XX  
XX SQ Sequence 15 AA;  
XX  
XX Query Match 100.0%; Score 39; DB 2; Length 15;  
XX Best Local Similarity 100.0%; Pred. No. 0.13;  
XX Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX QY 1 RAFVTIGK 8  
XX |||||  
XX Db 8 RAFVTIGK 15  
XX  
XX  
XX RESULT 34  
XX AAR74603  
XX ID AAR74603 standard; peptide; 15 AA.



```

XX AC AAR74603;
XX DT 16-OCT-2003 (revised)
XX DT 25-MAR-2003 (revised)
XX DT 01-NOV-1995 (first entry)
XX DE HIV-I variable loop residues 308-322.
XX KW MAb 5023; variable V3 loop; HIV-I; human immunodeficiency virus;
XX KW cancer antigen; monoclonal antibody.
XX OS Human immunodeficiency virus; I.
XX PN WO9510777-A1.
XX PD 20-APR-1995.
XX PF 14-OCT-1994; 94WO-US011754.
XX PR 15-OCT-1993; 93US-00138141.
XX PA (RAKO/) RAKOWICZSZULCZYNSKA E M.
XX PI Rakowiczszulczynska EM;
XX DR WPI; 1995-178531/23.
XX PT Detection of HIV-1 cross-reactive breast carcinoma-associated antigens -
XX PT for diagnosis and anti:sense therapy of breast and gynaecological
XX PT cancers.
XX PS Disclosure; Page 48; 71pp; English.
XX CC MAb 5023 was developed against AA residue 308-322 of the variable loop of
XX CC HIV-1 (AAR74603). MAb 5023 binds to the epitope GRAF. G preceding RAF is
XX CC believed to critical for internalization. MAb 5023 recognised p160, p120,
XX CC p42 and p24 in cancer cells. AAR74603 competitively blocked binding of
XX CC the MAb to the cancer antigens, indicating that at least the epitope
XX CC GRAF, which is recognised by the MAb, must also be present in cancer
XX CC antigens. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 25-
XX CC MAR-2003 to correct PI field.) (Updated on 16-OCT-2003 to standardise OS
XX CC field)
XX SQ Sequence 15 AA;
XX Query Match 100.0%; Score 39; DB 2; Length 15;
XX Best Local Similarity 100.0%; Pred. No. 0.13; Mismatches 0; Gaps 0;
XX Matches 8; Conservative 0; Indels 0;
XX QY 1 RAFVTIGK 8
XX DB |||||
XX 8 RAFVTIGK 15
XX RESULT 35
XX AAR66420
XX ID AAR66420 standard; peptide; 15 AA.
XX AC AAR66420;
XX DT 25-MAR-2003 (revised)
XX DT 03-AUG-1995 (first entry)
XX DE HIV-1 IIIB peptide 18-5.
XX KW T cell helper site; cytotoxic T cell response; neutralising antibody;
XX KW human immunodeficiency virus type 1; envelope glycoprotein gp120;
XX KW cluster peptide; principal neutralising determinant.
XX OS Synthetic.
XX PN WO9426785-A1.

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XX PD 24-NOV-1994.
XX PF 13-MAY-1994; 94WO-US005142.
XX PR 14-MAY-1993; 93US-00060988.
XX PA (USSH ) US SEC DEPT HEALTH.
XX PI Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;
XX DR WPI; 1995-006707/01.
XX PT Polypeptide inducing helper T cell, cytotoxic T cell and antibodies
XX PT responses - to target antigen in hosts of different MHC haplotypes, esp.
XX PT for therapeutic or prophylactic vaccines against HIV.
XX PS Example 1; Page 33; 120pp; English.
XX CC Single residues from the HIV-1 RF sequence (AAR66415) replaced residues
XX CC in the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue
XX CC on the binding of neutralising and non-neutralising sera from animals
XX CC immunised with the cluster peptides PCLUS 3-18 and PCLUS 6-18 (see
XX CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-
XX CC R66430) showed that binding was enhanced over peptide 18 control when a
XX CC tyrosine was substd. for a Val at position 11 and substns. at positions
XX CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of
XX CC sera was reduced when substns. were made in the principal neutralising
XX CC determinant sequence (PGRAF). In peptide 18-5, the Gly residue at
XX CC position 5 in peptide 18 has been replaced by an Ala residue. (Updated on
XX CC 25-MAR-2003 to correct PN field.)
XX SQ Sequence 15 AA;
XX Query Match 100.0%; Score 39; DB 2; Length 15;
XX Best Local Similarity 100.0%; Pred. No. 0.13; Mismatches 0; Gaps 0;
XX Matches 8; Conservative 0; Indels 0;
XX QY 1 RAFVTIGK 8
XX DB |||||
XX 8 RAFVTIGK 15
XX RESULT 36
XX AAR66421
XX ID AAR66421 standard; peptide; 15 AA.
XX AC AAR66421;
XX DT 25-MAR-2003 (revised)
XX DT 03-AUG-1995 (first entry)
XX DE HIV-1 IIIB peptide 18-6.
XX KW T cell helper site; cytotoxic T cell response; neutralising antibody;
XX KW human immunodeficiency virus type 1; envelope glycoprotein gp120;
XX KW cluster peptide; principal neutralising determinant.
XX OS Synthetic.
XX PN WO9426785-A1.
XX PD 24-NOV-1994.
XX PF 13-MAY-1994; 94WO-US005142.
XX PR 14-MAY-1993; 93US-00060988.
XX PA (USSH') US SEC DEPT HEALTH.
XX PI Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;
XX DR WPI; 1995-006707/01.

```

XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
PT for therapeutic or prophylactic vaccines against HIV.  
XX  
PS Example 1; Page 33; 120pp; English.  
XX  
CC Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
CC in the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue  
CC on the binding of neutralising and non-neutralising sera from animals  
CC immunised with the cluster peptides PC1US 3-18 and PC1US 6-18 (see  
CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
CC R66430) showed that binding was enhanced over peptide 18 control when a  
CC tyrosine was substd. for a Val at position 11 and substns. at positions  
CC 12, 13, 14 and 15 revealed a similar enhancement. Binding of both groups of  
CC sera was reduced when substns. were made in the principal neutralising  
CC determinant sequence (PGRAF). In peptide 18-6, the Pro residue at  
CC position 6 in peptide 18 has been replaced by an Ala residue. (Updated on  
CC 25-MAR-2003 to correct PN field.)  
XX  
SQ Sequence 15 AA;

Query Match 100.0%; Score 39; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.13;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
Db 8 RAFVTIGK 15  
|||||

RESULT 37  
AAR66414  
ID AAR66414 standard; peptide; 15 AA.  
AC AAR66414;  
XX  
XX  
DT 25-MAR-2003 (revised)  
DT 03-AUG-1995 (first entry)  
XX  
XX  
DE HIV-1 IIIB peptide 18.  
XX  
XX T cell helper site; cytotoxic T cell response; neutralising antibody;  
KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
KW cluster peptide; principal neutralising determinant; IIIB isolate.  
XX  
OS Synthetic.  
XX  
XX WO9426785-A1.  
XX  
XX 24-NOV-1994.  
XX  
XX 13-MAY-1994; 94WO-US0005142.  
XX  
XX 14-MAY-1993; 93US-00060988.  
XX  
XX (USSH ) US SEC DEPT HEALTH.  
XX  
XX Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
XX WPI; 1995-006707/01.  
XX  
XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
PT for therapeutic or prophylactic vaccines against HIV.  
XX  
PS Example 1; Page 33; 120pp; English.  
XX  
CC Synthetic peptides spanning multideterminant regions from the HIV  
CC envelope protein gp160 have been determined and are designated cluster  
CC peptides (PC1US). These peptides each consist of a cluster of overlapping  
CC determinants and are known to induce in vitro T cell proliferation and  
CC cytokine production in mice and humans of multiple MHC types. The cluster

CC peptides were co-linearly synthesised at the N-terminus of an  
CC immunodominant CTL determinant, peptide 18 (AAR66414), corresp. to part  
CC of the gp160 V3 loop and principal neutralising determinant region of HIV  
CC -1 IIIB isolate. (Updated on 25-MAR-2003 to correct PN field.)  
XX  
SQ Sequence 15 AA;

Query Match 100.0%; Score 39; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.13;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
Db 8 RAFVTIGK 15  
|||||

RESULT 38  
AAR66419  
ID AAR66419 standard; peptide; 15 AA.  
XX  
XX AAR66419;  
XX  
XX  
DT 25-MAR-2003 (revised)  
DT 03-AUG-1995 (first entry)  
XX  
XX  
DE HIV-1 IIIB peptide 18-4.  
XX  
XX T cell helper site; cytotoxic T cell response; neutralising antibody;  
KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
KW cluster peptide; principal neutralising determinant.  
XX  
OS Synthetic.  
XX  
XX WO9426785-A1.  
XX  
XX 24-NOV-1994.  
XX  
XX 13-MAY-1994; 94WO-US0005142.  
XX  
XX 14-MAY-1993; 93US-00060988.  
XX  
XX (USSH ) US SEC DEPT HEALTH.  
XX  
XX Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
XX WPI; 1995-006707/01.  
XX  
XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
PT for therapeutic or prophylactic vaccines against HIV.  
XX  
PS Example 1; Page 33; 120pp; English.  
XX  
CC Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
CC in the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue  
CC on the binding of neutralising and non-neutralising sera from animals  
CC immunised with the cluster peptides PC1US 3-18 and PC1US 6-18 (see  
CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
CC R66430) showed that binding was enhanced over peptide 18 control when a  
CC tyrosine was substd. for a Val at position 11 and substns. at positions  
CC 12, 13, 14 and 15 revealed a similar enhancement. Binding of both groups of  
CC sera was reduced when substns. were made in the principal neutralising  
CC determinant sequence (PGRAF). In peptide 18-4, the Arg residue at  
CC position 4 in peptide 18 has been replaced by a Lys residue. (Updated on  
CC 25-MAR-2003 to correct PN field.)  
XX  
SQ Sequence 15 AA;

Query Match 100.0%; Score 39; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.13;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8

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Db      |||||
      8 RAFVTIGK 15

RESULT 39
AAR66422 standard; peptide; 15 AA.
ID AAR66422
XX AC AAR66422;
XX AC AAR66422;
DT 25-MAR-2003 (revised)
DT 03-AUG-1995 (first entry)
XX XX
DE HIV-1 IIB peptide 18-7.
XX XX
XX T cell helper site; cytotoxic T cell response; neutralising antibody;
KW human immunodeficiency virus type 1; envelope glycoprotein gp120;
KW cluster peptide; principal neutralising determinant.
XX XX
OS Synthetic.
OS XX
PN WO9426785-A1.
XX XX
PD 24-NOV-1994.
XX XX
PF 13-MAY-1994; 94WO-US005142.
XX XX
PR 14-MAY-1993; 93US-00060988.
XX XX
PA (USSH ) US SEC DEPT HEALTH.
XX XX
PI Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;
XX WPI; 1995-006707/01.
XX XX
XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies
PT responses - to target antigen in hosts of different MHC haplotypes, esp.
PT for therapeutic or prophylactic vaccines against HIV.
XX XX
PS Example 1; Page 33; 120pp; English.
XX XX
CC Single residues from the HIV-1 RF sequence (AAR66415) replaced residues
CC in the HIV-1 IIB sequence (AAR66414) to test the effect of each residue
CC on the binding of neutralising and non-neutralising sera from animals
CC immunised with the cluster peptides PCUS 3-18 and PCUS 6-18 (see
CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-
CC R66430) showed that binding was enhanced over peptide 18 control when a
CC tyrosine was substd. for a val at position 11 and substns. at positions
CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of
CC sera was reduced when substns. were made in the principal neutralising
CC determinant sequence (PGRAP). In peptide 18-7, the Gly residue at
CC position 7 in peptide 18 has been replaced by an Ala residue. (Updated on
CC 25-MAR-2003 to correct PN field.)
XX XX
SQ Sequence 15 AA;

Query Match 100.0%; Score 39; DB 2; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.13;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 RAFVTIGK 8
Db |||||
8 RAFVTIGK 15

RESULT 41
AAR05535
ID AAR05535 standard; peptide; 15 AA.
XX XX
AC AAR05535;
XX XX
DT 16-OCT-2003 (revised)
DT 17-JAN-1997 (first entry)
XX XX
DE HIV-1 gp120 peptide (aa308-322).
XX XX
KW gC1q receptor; gC1q-R; HIV-1; gp120; immunogen; vaccine.
XX OS
XX Human immunodeficiency virus 1; strain HXB2R.
XX PN
XX WO9630400-A1.
XX PN
PD 03-OCT-1996.
XX XX
PF 22-MAR-1996; 96WO-US003905.

Cytotoxic T lymphocyte epitope 46 derived from env gp120 protein.
XX
DE Cytotoxic T lymphocyte; epitope; antigen; pathogenic; nef; gag; pol; env;
KW gp120; gp41; HIV; cell-mediated immunity; human immunodeficiency virus;
KW class I restricted.
XX
OS Human immunodeficiency virus.
XX
PN WO9428871-A1.
XX
PD 22-DEC-1994.
XX
PF 07-JUN-1994; 94WO-US006394.
XX
PR 07-JUN-1993; 93US-00072718.
XX
PA (ENDO-) ENDOCON INC.
XX
PI Leonard RJ;
XX
XX WPI; 1995-036067/05.
XX
XX Implant for sustained release of pathogen-associated antigen - forming
PT chronic inflammatory site producing cytotoxic T-lymphocytes lysing
PT infected cells, esp. for treating AIDS.
XX
PS Disclosure; Page 12; 35pp; English.
XX
CC AAR68744-805 are cytotoxic T lymphocyte (CTL) class I and II restricted
CC epitopes derived from human immunodeficiency virus proteins. AAR68789
CC corresponds to amino acid residues 308-322 of the env gp120 protein.
CC These antigens are examples of peptides that can be used with an
CC immunogenic implant. The implant is associated with an antigen associated
CC with a pathogen and used to form a discrete, localised chronic
CC inflammation site which acts as a local 'factory' for prodn. of CTL's
CC which lyse cells infected with a specific pathogen. The expanded set of
CC pathogen-specific CTL's can eradicate or prevent development of
CC infection, and can also be used to treat or arrest the development of
CC cancers associated with infection. (Updated on 25-MAR-2003 to correct PN
CC field.)
XX
SQ Sequence 15 AA;

Query Match 100.0%; Score 39; DB 2; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.13;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 RAFVTIGK 8
Db |||||
8 RAFVTIGK 15

RESULT 40
AAR68789
ID AAR68789 standard; peptide; 15 AA.
XX XX
AC AAR68789;
XX XX
DT 25-MAR-2003 (revised)
DT 23-AUG-1995 (first entry)

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XX 24-MAR-1995; 95US-00410360.  
 XX (TANO-) TANOX BIOSYSTEMS INC.  
 XX Fung MSC, Sun BNV, Sun CRY, Kim YW, Yu L;  
 XX WPI; 1996-455274/45.  
 XX New gC1q-receptor-based, HIV-1 gp 120 binding peptide(s) - for preventing  
 XX PT and treating HIV-1 infection.  
 XX PS Claim 10; Page 49; 53pp; English.  
 XX A peptide (AAW05535) corresponds to amino acids 308-322 of the V3 region  
 XX of gp120 from HIV-1 strain HXB2R2. It was used to examine the binding of  
 XX gC1q receptor (gC1q-R) (see also AAW05534) to HIV-1 gp120. Anti-HIV-1  
 XX gp120 V3 domain murine monoclonal antibody BAT123 was able to react with  
 XX gp120 bound to gC1q-R, showing that the binding of gC1q-R to gp120 does  
 XX not involve the V3 region of gp120; the binding site was localised to  
 XX amino acids 444-459 (see also AAW05533) of gp120. (Updated on 16-OCT-2003  
 XX to standardise OS field)  
 XX SQ Sequence 15 AA;  
 Query Match 100.0%; Score 39; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.13;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RAFVTIGK 8  
 DB |||||  
 8 RAFVTIGK 15  
 RESULT 42  
 AAR92033  
 ID AAR92033 standard; peptide; 15 AA.  
 XX AC AAR92033;  
 XX 29-MAY-1996 (first entry)  
 DT Hydrophilic peptide for epimorphin modification (5).  
 DE Epimorphin; human; mouse; wound; burn; epithelial tissue; diagnosis;  
 KW treatment; morphogenetic abnormality; cosmetic; hair growth stimulator.  
 XX Synthetic.  
 XX OS  
 XX EP698666-A2.  
 XX 28-FEB-1996.  
 XX 20-JUN-1995; 95EP-00304270.  
 XX 21-JUN-1994; 94JP-00162874.  
 XX 31-MAR-1995; 95JP-00099979.  
 XX 31-MAR-1995; 95JP-00099980.  
 XX (SUME) SUMITOMO ELECTRIC IND CO.  
 XX Hirai Y, Koshida S, Oka Y;  
 XX WPI; 1996-118213/13.  
 XX Novel polypeptide containing an epimorphin functional domain - has  
 XX possible benefits in epithelial tissue treatments, e.g. burns and for  
 XX PT artificial organs.  
 XX PS Claim 8; Page 57; 62pp; English.  
 XX New polypeptides contain a first portion of 5-99 amino acids joined to a  
 XX second portion contg. at least a functional domain of epimorphin. The

CC first portion may be selected from the peptides given in AAR92029 to  
 CC AAR92036. The second portion may be full-length epimorphin (see AAR92037  
 CC to AAR92042 for human and mouse epimorphins). Fragments of epimorphins  
 CC given in AAT16083 to AAT16090 are used in the prodn. of modified  
 CC epimorphins. The modified epimorphins are useful for the development of  
 CC diagnosis and treatment of morphogenetic abnormalities of epithelial  
 CC tissue or novel remedies for wounds, eg burns, after surgery and for  
 CC artificial organs. They may also be used as components of cosmetics, hair  
 CC growth stimulators, etc  
 XX SQ Sequence 15 AA;  
 Query Match 100.0%; Score 39; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.13;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RAFVTIGK 8  
 DB |||||  
 8 RAFVTIGK 15  
 RESULT 43  
 AAW07931  
 ID AAW07931 standard; peptide; 15 AA.  
 XX AC AAW07931;  
 XX 16-OCT-2003 (revised)  
 DT 31-JAN-1997 (first entry)  
 DE gp120 peptide p18p.  
 XX HIV; gp120; HIV-IIIB strain; HIV-1 transmission; foetal transmission;  
 KW neutralising antibody; passive immunisation; anti-idiotypic antibody;  
 KW gp41; vaccine; active immunotherapy.  
 XX Human immunodeficiency virus 1.  
 XX OS  
 XX US5556744-A.  
 XX 17-SEP-1996.  
 PD 24-MAR-1994; 94US-00218025.  
 XX 29-MAY-1992; 92US-00891451.  
 XX (UYPE-) UNIV PENNSYLVANIA.  
 XX (WIST-) WISTAR INST ANATOMY & BIOLOGY.  
 XX Williams WV, Weiner DB, Ugen KE;  
 XX WPI; 1996-432980/43.  
 XX Determining the likelihood of maternal transmission of HIV-1 to foetus -  
 XX by measuring maternal reactivity with specific gp120 and gp41 derived  
 XX peptide(s), also used for diagnosing HIV in infants.  
 XX Example 2; Col 18; 63pp; English.  
 XX This sequence represents a HIV gp120 peptide that can be used in the  
 XX method of the invention. The method of the invention is for determining  
 XX whether or not a mother will transmit HIV-1 to a foetus. The method  
 XX comprises incubating a sample from the HIV-infected mother, with a  
 XX collection of HIV peptides. The HIV peptides includes at least one of the  
 XX gp120 sequences (such as AAW07909-W07917), and at least one HIV gp41  
 XX derived peptide (see AAW07918-W07928). The number of peptides that react  
 XX with the sample is determined, and this number is compared with a  
 XX standard that shows pattern reactivity for a patient of transmission  
 XX status. A non-transmissible HIV sample is indicated if the test sample  
 XX reacts with twice as many peptides as the standard. The method detects  
 XX the presence of neutralising antibodies that protect against mother to  
 XX infant transmission of HIV. These sequences can also be used in vaccines  
 XX to protect against transmission. Antibodies against these sequences can

CC be used for passive immunisation, and to generate anti-idiotypic  
 CC antibodies for use in vaccines or active immunotherapy. (Updated on 16-  
 CC OCT-2003 to standardise OS field)  
 XX  
 SQ Sequence 15 AA;

Query Match 100.0%; Score 39; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.13;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
 Db 8 RAFVTIGK 15  
 |||||

RESULT 44  
 AAR92007  
 ID AAR92007 standard; protein; 15 AA.  
 XX  
 AC AAR92007;  
 XX  
 DT 16-OCT-2003 (revised)  
 DT 27-SEP-1996 (first entry)  
 XX  
 DE HIV-1 V3 loop epitope, for insertion in Mycobacterium alpha antigen.  
 XX  
 KW Mycobacterium bovis BCG; AIDS vaccine; surface protein; alpha antigen;  
 KW Human immunodeficiency virus type 1; fusion protein; gp120 epitope;  
 KW V3 loop.  
 XX  
 OS Human immunodeficiency virus i.  
 XX  
 PN WO9604009-A1.  
 XX  
 PD 15-FEB-1996.  
 XX  
 PF 31-JUL-1995; 95WO-JP001515.  
 XX  
 PR 29-JUL-1994; 94JP-00178462.  
 XX  
 PA (AJIN ) AJINOMOTO CO INC.  
 PA (NINA-) JAPAN AGENCY NAT INST HEALTH.  
 XX  
 PI Matsuo K, Chujo Y, Yamazaki A, Honda M, Yamazaki S, Tasaka H;  
 DR WPI; 1996-129127/13.  
 DR N-PSDB; AAT16048, AAT16049.  
 XX  
 PT BCG containing vaccine secretes chimeric protein containing foreign  
 PT antigen - has enhanced immunogenicity and antigenicity esp. when used as  
 PT an anti-AIDS vaccine.  
 XX  
 PS Example 2; Page 17; 56pp; Japanese.  
 XX  
 CC Antigenic peptides can be inserted into the alpha-antigen sequence of a  
 CC Mycobacterium and secreted from an appropriately transformed M.bovis BCG  
 CC cell. The resulting chimeric antigen has greatly enhanced antigenicity  
 CC and immunogenicity and is recognised in vivo by B-cells which recognise  
 CC the alpha-antigen. The present sequence is that of a HIV-1 gp120 V3 loop  
 CC epitope which was incorporated into the alpha antigen. M.bovis BCG cells  
 CC secreting a chimeric protein comprising the epitope sequence are useful  
 CC as anti-AIDS vaccines. (Updated on 16-OCT-2003 to standardise OS field)  
 XX  
 SQ Sequence 15 AA;

Query Match 100.0%; Score 39; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.13;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
 Db 8 RAFVTIGK 15  
 |||||

RESULT 46  
 AAW10348

RESULT 45  
 AAW24219  
 ID AAW24219 standard; peptide; 15 AA.  
 XX  
 AC AAW24219;  
 XX  
 DT 17-MAR-1998 (first entry)  
 XX  
 DE CD4+ T-lymphocyte epitope to HIV-1 V3 loop derived peptide V3-LAI-P18.  
 XX  
 KW T-lymphocyte epitope; diagnosis; antigen; infectious disease;  
 KW delayed-type hypersensitivity assay; vaccine development.  
 XX  
 OS Synthetic.  
 OS Human immunodeficiency virus.  
 XX  
 PN WO9727462-A2.  
 XX  
 PD 31-JUL-1997.  
 XX  
 PF 27-JAN-1997; 97WO-US001084.  
 XX  
 PR 26-JAN-1996; 96US-0010679P.  
 XX  
 PA (USSA ) US DEPT ARMY GOVERNMENT US ARMY MEDICAL.  
 XX  
 PI Sitz KV, Brix DL;  
 XX  
 DR WPI; 1997-393814/36.  
 XX  
 PT Peptide fragments containing antigen epitope(s) used to trace diseases -  
 PT used in a delayed-type hypersensitivity assay, for in vivo mapping of  
 PT human T-lymphocyte epitope(s) e.g. for diagnosis, vaccine development  
 PT etc.  
 XX  
 PS Disclosure; Page 6; 14pp; English.  
 XX  
 CC Peptide fragments AAW24217-20 were used to demonstrate a new method of  
 CC tracing sources of infectious diseases. The method comprises preparing a  
 CC short (9-50 amino acid) peptide containing at least one non-conserved  
 CC epitope of an organism, injecting a composition containing the peptide  
 CC intradermally into a test subject in a delayed-type hypersensitivity  
 CC (DTH) assay and observing the injection site at intervals for induration.  
 CC In this example CD4+ T-lymphocyte epitopes to the HIV-1 V3 loop were  
 CC mapped by existing in vitro technique for two existing HIV infected  
 CC individuals and used to design peptides AAW24217-20. The method allows  
 CC the T-lymphocyte epitopes of a large antigen to be determined in vivo in  
 CC humans. The method is useful in medicine e.g. in diagnosis, monitoring.  
 CC and treatment design for infectious disease exposure, active autoimmune  
 CC disease, allergic diseases and malignancy. It is especially useful for  
 CC tracing infectious diseases e.g HIV, particularly when a sequence is  
 CC present only in certain strains of an organism, and developing suitable  
 CC vaccines. Vaccinated individuals can also be tested to verify protection  
 CC against a particular strain. The method allows in vivo mapping of T-  
 CC lymphocyte epitopes, not previously possible. The method is simpler, more  
 CC rapid and more sensitive. It can also be applied in a variety of  
 CC environments e.g. undeveloped regions since specialist equipment is not  
 CC required  
 XX  
 SQ Sequence 15 AA;

Query Match 100.0%; Score 39; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.13;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
 Db 8 RAFVTIGK 15  
 |||||

```

ID AAW10348 standard; peptide; 15 AA.
XX
AC AAW10348;
XX
DT 15-OCT-1997 (first entry)
XX
DE HIV epitope env P18-IIIB amino acid residues 315-329 of gp160.
XX
DE Human immunodeficiency virus type-1; HIV-1; T cell response; detection;
KW peripheral blood mononuclear cell; PBMC.
XX
OS Synthetic.
XX
XX WO9641189-A1.
XX
XX 19-DEC-1996.
XX
XX 07-JUN-1996; 96WO-US010108.
XX
XX 07-JUN-1995; 95US-00488435.
XX
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
XX Shearer GM, Berzofsky JA, Clerici M;
XX
XX WPI; 1997-108658/10.
XX
XX Diagnosis of exposure to infectious agents, partic. HIV - by detecting
PT activation of peripheral blood mononuclear cells from patient by epitope
PT of infectious agent.
XX
XX Claim 15; Page 62; 82pp; English.
XX
XX The present sequence represents a synthetic HIV-1 gp160 peptide env P18-
CC IIIB for use in a method for diagnosing exposure of a patient to human
CC immunodeficiency virus (HIV). The method involves: (a) obtaining
CC peripheral blood mononuclear cells (PBMC) from a patient; (b) incubating
CC the PBMC with at least 1 synthetic peptide representing an epitope(s) of
CC the infectious agent (e.g. the present sequence); and (c) determining the
CC activation of the PBMC as a result of the incubation in step (b). The
CC method can provide for the early detection of exposure to infectious
CC organisms, specifically HIV in this case. The method can be used to
CC assess exposure to HIV without concomitant infection. It also provides an
CC earlier identification of HIV exposure, than is provided by
CC seroconversion
XX
XX Sequence 15 AA;
XX
XX Query Match 100.0%; Score 39; DB 2; Length 15;
XX Best Local Similarity 100.0%; Pred. No. 0.13;
XX Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 RAFVTIGK 8
XX 8 RAFVTIGK 15
XX
XX RESULT 47
XX AAW22031
XX ID AAW22031 standard; peptide; 15 AA.
XX
XX AAW22031;
XX
XX 20-FEB-1998 (first entry)
XX
XX Antigenic human immunodeficiency virus peptide P18.
XX
XX Antigenic peptide; human papillomavirus; MAGE gene; BAGE-1 peptide; P18;
XX human immunodeficiency virus; cancer antigen; tyrosinase; signal protein;
XX anthrax lethal factor; LF; toxin; cationic fusion peptide; translocation;
XX gene therapy; polycationic affinity handle; therapeutic protein; LFN.
XX
XX Human immunodeficiency virus.
XX
XX
XX AAW10348 standard; peptide; 15 AA.
XX
XX 03-JUL-1997.
XX
XX 13-DEC-1996; 96WO-US020463.
XX
XX 13-DEC-1995; 95US-0008518P.
XX
XX 07-JUN-1996; 96US-0019275P.
XX
XX (HARD ) HARVARD COLLEGE.
XX
XX Collier RJ, Blanke SR, Milne JC, Lyszak EL, Ballard JD;
XX Starnbach MN;
XX
XX WPI; 1997-350782/32.
XX
XX Introducing therapeutic proteins, especially antigens, into cells - using
XX toxin molecules and/or polycationic handles for delivery.
XX
XX Claim 15; Page 36; 67pp; English.
XX
XX This is the antigenic human immunodeficiency virus peptide P18. This
XX antigenic compound can be introduced into the cytoplasm of a cell by a
XX new method where the cell is contacted with a fusion molecule comprising
XX a delivery molecule. The delivery molecule can either be a polycationic
XX affinity handle, LFN (the protective antigen binding domain of anthrax
XX lethal factor) or a toxin delivery molecule related to LFN. The antigenic
XX compound is linked to either of the delivery molecules by a covalent
XX bond. The moiety of a toxin enhances delivery of the antigenic compound
XX into a cell. The anthrax toxin system of the invention eliminates the
XX need to generate fusion proteins with a toxin B moiety, which alleviates
XX problems associated with incorrect folding of lengthy fusion proteins.
XX Small cationic fusion peptides substituted for LFN may reduce the
XX possibility of steric interference with the biological activity of the
XX translocated protein. The method is used for the introduction of
XX antigens, e.g. MHC class I antigens or any other therapeutic protein,
XX e.g. toxin molecules, apoptosis-inducing molecules or signalling proteins
XX into the cells
XX
XX Sequence 15 AA;
XX
XX Query Match 100.0%; Score 39; DB 2; Length 15;
XX Best Local Similarity 100.0%; Pred. No. 0.13;
XX Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 RAFVTIGK 8
XX 8 RAFVTIGK 15
XX
XX RESULT 48
XX AAW39275
XX ID AAW39275 standard; peptide; 15 AA.
XX
XX AAW39275;
XX
XX 19-MAY-1998 (first entry)
XX
XX HIV-1 synthetic peptide IIIB.
XX
XX Human immunodeficiency virus type I; HIV-1; cytotoxic T-cell; CTC;
XX vaccine; prophylactic; immunotherapy.
XX
XX Synthetic.
XX
XX Human immunodeficiency virus 1.
XX
XX US5711947-A.
XX
XX 27-JAN-1998.
XX
XX 23-JUL-1993; 93US-00095332.
XX

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26-JAN-1988; 88US-00148692.  
18-SEP-1991; 91US-00760530.  
(USSH ) US DEPT HEALTH & HUMAN SERVICES.  
Germain RN, Berzofsky JA, Takahashi H;  
WPI; 1998-119931/11.  
Inducing cytotoxic T-cell response to HIV - by administering gp160 vector and chimeric gp160 peptide(s).  
Example 1; Col 3; 25pp; English.  
Peptides AAW39275-W39300 are used in a novel method for inducing cytotoxic T-cell (CTC) activity specific for a broad array of HIV-1 isolates using hybrid synthetic peptides. The method involves first administering a recombinant viral vector expressing the HIV-1 gp160 envelope glycoprotein and then administering at least 1 chimeric synthetic polypeptide. When several synthetic polypeptides having sequences corresponding to amino acids 315-329 of the gp160 envelope glycoprotein of HIV-1 strain IIIB, in which amino acid 325 is substituted by the corresponding amino acid from other strains or isolates, are used, a CTC response to a broad range of HIV-1 isolates can be elicited. These synthetic peptides are useful as vaccines for the prophylaxis or immunotherapy of HIV-1 virus infection  
Sequence 15 AA;  
Query Match 100.0%; Score 39; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.13;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 RAPVTIGK 8  
Db 8 RAPVTIGK 15  
RESULT 49  
AAW40316  
ID AAW40316 standard; peptide; 15 AA.  
AC AAW40316;  
AT 17-OCT-2003 (revised)  
DT 23-JUN-1998 (first entry)  
XX HIV-1 IIIB gp120 peptide fragment.  
DE Epitope; vaccine; V3; gp120; immune response; hypervariable region;  
KW Immunoglobulin; histocompatibility antibody.  
XX Human immunodeficiency virus 1.  
XX JF10072369-A.  
PN 17-MAR-1998.  
PD 02-SEP-1996; 96JP-00232378.  
PF 02-SEP-1996; 96JP-00232378.  
XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.  
PA WPI; 1998-234701/21.  
XX Vaccine against human immunodeficiency virus - induces immune response reaction to V3 epitope of virus.  
PT Example 1; Page 5; 8pp; Japanese.  
PS This sequence represents a fragment of the human immunodeficiency virus (HIV) Type 1 strain IIIB gp120 protein. This sequence is used in a method

CC resulting in the production of a vaccine against HIV which induces an immune response to the V3 epitope of HIV. This method which comprises the transplantation of an epitope of HIV at plural sites in the hypervariable region of immunoglobulin, the preparation of the epitope molecule histocompatibility antibody, and optionally chemically cross linking the epitope. An epitope histocompatibility antibody is also described in the specification which specifically responds to HIV, prepared by transplantation of an epitope comprising a peptide obtained from at least one V3 sequence of HIV. (Updated on 17-OCT-2003 to standardise OS field)  
XX Sequence 15 AA;  
SQ Query Match 100.0%; Score 39; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.13;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 RAPVTIGK 8  
Db 8 RAPVTIGK 15  
RESULT 50  
AAW76897  
ID AAW76897 standard; peptide; 15 AA.  
XX AAW76897;  
AC AAW76897;  
AT 25-JAN-1999 (first entry)  
DT Fusion immunoglobulin heavy chain HIV gp120 T cell epitope #16.  
DE B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IGH;  
XX human immune deficiency virus; HIV; tolerance; treatment; therapy;  
KW prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;  
KW microbial infection; autoimmune disease; antibody; apoptosis;  
KW antiviral T cell immunity.  
XX Mus sp.  
OS Homo sapiens.  
XX WO9836087-A1.  
PN 20-AUG-1998.  
PD 13-FEB-1998; 98WO-US002766.  
PF 13-FEB-1997; 97US-0040581P.  
PR (AMNA-) AMERICAN NAT RED CROSS.  
XX Scott D, Zambidis E;  
XX WPI; 1998-506315/43.  
XX New fusion immunoglobulin heavy chain including gp120 epitopes and related complete antibodies - DNA, vectors and transformed cells, used to induce tolerance to the epitopes for treatment of human immune deficiency virus infection.  
XX Claim 11; Page 120; 154pp; English.  
XX This sequence is an epitope used in the construction of a novel fusion immunoglobulin heavy chain (IGH) protein with a mammalian, especially human, IGH chain fused in frame at its N-terminus to one or more human immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or transfected cells are used to tolerate subjects to gp120 epitopes and to maintain this tolerance, particularly for treatment of HIV infection, optionally together with other therapeutic/prophylactic agents such as vaccines, chemotherapeutic agents and immune response modifiers. Such proteins can be used against other diseases where an immune response is deleterious, e.g. microbial infection, tumours or autoimmune disease.  
XX Induction of tolerance suppresses production of antibodies against gp120, so prevents or inhibits 'bystander' apoptosis of uninfected T cells that

CC are bound to gp120 protein, maximising induction of protective antiviral  
 CC T cell immunity  
 XX Sequence 15 AA;  
 SQ

Query Match 100.0%; Score 39; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.13;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFVTIGK 8  
 DB 7 RAFVTIGK 14  
 |||||

RESULT 51  
 AAW76898  
 ID AAW76898 standard; peptide; 15 AA.  
 XX  
 AC AAW76898;  
 XX  
 DT 25-JAN-1999 (first entry)  
 XX  
 DE Fusion immunoglobulin heavy chain HIV gp120 T cell epitope #17.  
 XX  
 KW B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IgH;  
 KW human immune deficiency virus; HIV; tolerance; treatment; therapy;  
 KW prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;  
 KW microbial infection; autoimmune disease; antibody; apoptosis;  
 KW antiviral T cell immunity.  
 XX  
 OS Mus sp.  
 OS Homo sapiens.  
 XX  
 PN WO9836087-A1.  
 XX  
 PD 20-AUG-1998.  
 XX  
 PF 13-FEB-1998; 98WO-US002766.  
 XX  
 PR 13-FEB-1997; 97US-0040581P.  
 XX  
 PA (AMNA-) AMERICAN NAT RED CROSS.  
 XX  
 PI Scott D, Zambidis E;  
 XX  
 DR WPI; 1998-506315/43.  
 XX  
 PS New fusion immunoglobulin heavy chain including gp120 epitopes and  
 XX related complete antibodies - DNA, vectors and transformed cells, used to  
 PT induce tolerance to the epitopes for treatment of human immune deficiency  
 PT virus infection.  
 XX  
 PS Claim 11; Page 120; 154pp; English.  
 XX  
 CC This sequence is an epitope used in the construction of a novel fusion  
 CC immunoglobulin heavy chain (IgH) protein with a mammalian, especially  
 CC human, IgH chain fused in frame at its N-terminus to one or more human  
 CC immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or  
 CC transfected cells are used to tolerate subjects to gp120 epitopes and to  
 CC maintain this tolerance, particularly for treatment of HIV infection,  
 CC optionally together with other therapeutic/prophylactic agents such as  
 CC vaccines, chemotherapeutic agents and immune response modifiers. Such  
 CC proteins can be used against other diseases where an immune response is  
 CC deleterious, e.g. microbial infection, tumours or autoimmune disease.  
 CC Induction of tolerance suppresses production of antibodies against gp120,  
 CC so prevents or inhibits 'bystander' apoptosis of uninfected T cells that  
 CC are bound to gp120 protein, maximising induction of protective antiviral  
 CC T cell immunity  
 XX  
 SQ Sequence 15 AA;

Query Match 100.0%; Score 39; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.13;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFVTIGK 8  
 DB 7 RAFVTIGK 14  
 |||||

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFVTIGK 8  
 DB 8 RAFVTIGK 15  
 |||||

RESULT 52  
 AAW76900  
 ID AAW76900 standard; peptide; 15 AA.  
 XX  
 AC AAW76900;  
 XX  
 DT 25-JAN-1999 (first entry)  
 XX  
 DE Fusion immunoglobulin heavy chain HIV gp120 T cell epitope #19.  
 XX  
 KW B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IgH;  
 KW human immune deficiency virus; HIV; tolerance; treatment; therapy;  
 KW prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;  
 KW microbial infection; autoimmune disease; antibody; apoptosis;  
 KW antiviral T cell immunity.  
 XX  
 OS Mus sp.  
 OS Homo sapiens.  
 XX  
 PN WO9836087-A1.  
 XX  
 PD 20-AUG-1998.  
 XX  
 PF 13-FEB-1998; 98WO-US002766.  
 XX  
 PR 13-FEB-1997; 97US-0040581P.  
 XX  
 PA (AMNA-) AMERICAN NAT RED CROSS.  
 XX  
 PI Scott D, Zambidis E;  
 XX  
 DR WPI; 1998-506315/43.  
 XX  
 PS New fusion immunoglobulin heavy chain including gp120 epitopes and  
 XX related complete antibodies - DNA, vectors and transformed cells, used to  
 PT induce tolerance to the epitopes for treatment of human immune deficiency  
 PT virus infection.  
 XX  
 PS Claim 11; Page 120; 154pp; English.  
 XX  
 CC This sequence is an epitope used in the construction of a novel fusion  
 CC immunoglobulin heavy chain (IgH) protein with a mammalian, especially  
 CC human, IgH chain fused in frame at its N-terminus to one or more human  
 CC immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or  
 CC transfected cells are used to tolerate subjects to gp120 epitopes and to  
 CC maintain this tolerance, particularly for treatment of HIV infection,  
 CC optionally together with other therapeutic/prophylactic agents such as  
 CC vaccines, chemotherapeutic agents and immune response modifiers. Such  
 CC proteins can be used against other diseases where an immune response is  
 CC deleterious, e.g. microbial infection, tumours or autoimmune disease.  
 CC Induction of tolerance suppresses production of antibodies against gp120,  
 CC so prevents or inhibits 'bystander' apoptosis of uninfected T cells that  
 CC are bound to gp120 protein, maximising induction of protective antiviral  
 CC T cell immunity  
 XX  
 SQ Sequence 15 AA;

Query Match 100.0%; Score 39; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.13;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFVTIGK 8  
 DB 2 RAFVTIGK 9  
 |||||



|           |   |  |
|-----------|---|--|
| XX        | 29-SEP-1997;  | 97US-0060338P.                                     |
| PR        | 12-DEC-1997;  | 97US-00990180.                                     |
| XX        | (BETH-)   | BETH ISRAEL DEACONESS MEDICAL CENT.                |
| PA        | Letvin NL,  | Barouch DH;  |
| PI        | WPI;  | 1999-254931/21.                                    |
| XX        | New vaccine compositions for treating AIDS, malaria, tuberculosis, cancer or influenza. |  |
| XX        | Example 3;  | Page 22; 66pp; English.                            |
| PS        | The invention relates to vaccine compositions comprising a vaccine and a                |  |
| XX        | timed-release formulation of a cytokine or cytokine/immunoglobulin fusion               |  |
| CC        | protein or plasmid. The formulation or device releases the cytokine                     |  |
| CC        | protein or plasmid at one or more temporal points subsequent to vaccine                 |  |
| CC        | administration. The vaccines can be used for treating an autoimmune                     |  |
| CC        | disease, or an infectious disease, an inflammatory disease, a neoplastic                |  |
| CC        | disease, or an immunologic disease in an individual. The vaccines can be                |  |
| CC        | used to elicit immune responses against diseases such as AIDS, malaria,                 |  |
| CC        | tuberculosis, hepatitis C, hepatitis B, cancer or influenza. The methods                |  |
| CC        | can provide for enhancement of one or more immunologic parameters such as               |  |
| CC        | an antibody response, a cellular proliferative response as well as                      |  |
| CC        | cytotoxic T-lymphocyte levels. In addition the Ig can increase the                      |  |
| CC        | circulating half life of the cytokine   |  |
| XX        | Sequence 15 AA;   |  |
| SQ        | Query Match   | 100.0%; Score 39; DB 2; Length 15;                 |
|           | Best Local Similarity   | 100.0%; Pred. No. 0.13;                            |
|           | Matches   | 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0; |
| QY        | 1 RAFVTIGK 8  |  |
|           |   |  |
| DB        | 8 RAFVTIGK 15   |  |
|           |   |  |
| RESULT 55 |   |  |
| AAW54929  | AAW54929 standard; peptide; 15 AA.  |  |
| ID        | AAW54929 standard; peptide; 15 AA.  |  |
| XX        | AAW54929;   |  |
| AC        | AAW54929;   |  |
| XX        | 23-SEP-1999 (first entry)   |  |
| DT        | HIV peptide R15K-1.   |  |
| XX        | Hepatitis B virus; HBV; X protein; cytotoxic T lymphocyte; liposome; CTL;               |  |
| KW        | antigen; immunity; liver cancer.  |  |
| XX        | Human immunodeficiency virus 1.   |  |
| OS        | Synthetic.  |  |
| XX        | WO9936434-A1.   |  |
| PN        | 22-JUL-1999.  |  |
| XX        | 19-JAN-1998; 98WO-KR000010.   |  |
| PF        | 19-JAN-1998; 98WO-KR000010.   |  |
| XX        | (MOGA-) MOGAM BIOTECHNOLOGY RES INST.   |  |
| PA        | Kim T, Lee K, Chang J, Cho S, Hwang Y, Choi M, Cheong H;                                |  |
| XX        | WPI; 1999-444387/37.  |  |
| XX        | Hepatitis B virus protein X-derived peptide antigens used to stimulate                  |  |
| XX        | cytotoxic T lymphocytes, useful for treatment of HBV-associated diseases,               |  |
| PT        | especially liver cancer.  |  |

XX Example 5; Page 14; 33pp; English.

PS The present invention describes peptide antigens AAY24459 to AAY24463

CC derived from the X protein of hepatitis B virus (HBV) which are

CC recognized by cytotoxic T lymphocytes (CTL). The peptide antigens derived

CC from HBV X protein are useful for inducing CTLs against the virus or

CC inducing immunological tolerance to the virus. pH-sensitive liposomes

CC containing the peptide antigens are used to induce cellular immunity so

CC that CTLs specific to the virus can be produced. This is useful for

CC prevention and treatment of HBV-associated diseases, especially HBV-

CC associated liver cancer. pH-sensitive liposomes permit the selective

CC transportation of anti-cancer drugs. The present sequence represents a

CC peptide used in an example from the present invention

XX Sequence 15 AA;

Query Match 100.0%; Score 39; DB 2; Length 15;

Best Local Similarity 100.0%; Pred. No. 0.13;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8

Db 8 RAFVTIGK 15

RESULT 56

AAY25189

ID AAY25189 standard; peptide; 15 AA.

XX AC AAY25189;

XX DT 03-SEP-1999 (first entry)

XX DE HIV protein gp160 peptide fragment #1.

XX KW Heat shock protein; HSP; complex; denatured protein matrix; antigen;

XX KW vaccine; allergic disease; treatment; susceptibility; Th2; skin rash;

XX KW allergic reaction; asthma; gp160.

XX OS Human immunodeficiency virus.

XX OS WO9929182-A1.

XX PN 17-JUN-1999.

XX PF 04-DEC-1998; 98WO-US025734.

XX PR 05-DEC-1997; 97US-00985548.

XX PR 05-DEC-1997; 97US-00986234.

XX PA (UYNE-) UNIV NEW MEXICO STATE.

XX PI Wallen ES, Moseley PL;

XX PT WPI; 1999-394912/33.

XX PT Synthesizing heat shock protein complexes using a denatured protein matrix.

XX Example 1; Fig 1A; 33pp; English.

PS This invention describes a novel method for synthesizing heat shock

CC protein (HSP) complexes comprising adding a heat shock protein to a

CC denatured protein matrix for binding, and adding a complexing solution

CC comprising a peptide to elute a heat shock protein-peptide complex. A HSP

CC -antigen complex is useful as a vaccine for treating an allergic disease

CC (in a mammal, preferably a human) to reduce susceptibility of the Th2

CC response, the complex comprising a HSP-antigenic peptide complex. The

CC complex is administered to prevent a mammal from having an allergic

CC reaction to an allergic disease, or administered to a mammal having an

CC allergic disease, to reduce the allergic reactions. Allergic diseases

CC include asthma and skin rashes. Prior art methods or preventing/treating

CC allergic diseases include antihistamines which treat only the symptoms,

CC corticosteroids which have severe side effects and desensitization

CC therapy which has limited uses. The new method also allows more

CC flexibility of use of peptide-based vaccines, as prior art HSP-based

CC vaccines require isolation from a portion of the tumour itself. This

CC sequence represents a peptide fragment from the HIV gp160 protein which

CC is used in the method of the invention

XX Sequence 15 AA;

Query Match 100.0%; Score 39; DB 2; Length 15;

Best Local Similarity 100.0%; Pred. No. 0.13;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8

Db 8 RAFVTIGK 15

RESULT 57

AAY25204

ID AAY25204 standard; peptide; 15 AA.

XX AC AAY25204;

XX DT 03-SEP-1999 (first entry)

XX DE HIV V3 peptide fragment #10.

XX KW Heat shock protein; HSP; complex; denatured protein matrix; antigen;

XX KW vaccine; allergic disease; treatment; susceptibility; Th2; skin rash;

XX KW allergic reaction; asthma; V3 protein.

XX OS Human immunodeficiency virus.

XX OS WO9929182-A1.

XX PN 17-JUN-1999.

XX PF 04-DEC-1998; 98WO-US025734.

XX PR 05-DEC-1997; 97US-00985548.

XX PR 05-DEC-1997; 97US-00986234.

XX PA (UYNE-) UNIV NEW MEXICO STATE.

XX PI Wallen ES, Moseley PL;

XX PT WPI; 1999-394912/33.

XX PT Synthesizing heat shock protein complexes using a denatured protein matrix.

XX Example 1; Fig 1B; 33pp; English.

PS This invention describes a novel method for synthesizing heat shock

CC protein (HSP) complexes comprising adding a heat shock protein to a

CC denatured protein matrix for binding, and adding a complexing solution

CC comprising a peptide to elute a heat shock protein-peptide complex. A HSP

CC -antigen complex is useful as a vaccine for treating an allergic disease

CC (in a mammal, preferably a human) to reduce susceptibility of the Th2

CC response, the complex comprising a HSP-antigenic peptide complex. The

CC complex is administered to prevent a mammal from having an allergic

CC reaction to an allergic disease, or administered to a mammal having an

CC allergic disease, to reduce the allergic reactions. Allergic diseases

CC include asthma and skin rashes. Prior art methods or preventing/treating

CC corticosteroids which have severe side effects and desensitization

CC therapy which has limited uses. The new method also allows more

CC flexibility of use of peptide-based vaccines, as prior art HSP-based

CC vaccines require isolation from a portion of the tumour itself. This

CC sequence represents a peptide fragment from the HIV V3 protein which is

CC used in the method of the invention

```

XX SQ Sequence 15 AA;
    Query Match 100.0%; Score 39; DB 2; Length 15;
    Best Local Similarity 100.0%; Pred. No. 0.13;
    Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8
Db |||||
8 RAFVTIGK 15

RESULT 58
AAW05356
ID AAY05356 standard; peptide; 15 AA.
XX AC AAY05356;
XX DT 17-OCT-2003 (revised)
XX DT 29-JUN-1999 (first entry)
XX DE HIV-1 CLUVAC peptide, SEQ ID NO. 15.
XX KW HIV-1; CLUVAC; cluster peptide vaccine construct; cytotoxic T lymphocyte;
XX KW protective mucosal CTL response; hepatitis A virus; papilloma virus;
XX KW feline immunodeficiency virus; feline leukaemia virus; M. tuberculosis;
XX KW Listeria monocytogenes; M. leprae; Giardia lamblia;
XX KW immune response induction.
XX OS Human immunodeficiency virus 1.
XX PN W09912563-A2.
XX PD 18-MAR-1999.
XX PF 11-SEP-1998; 98MO-US019028.
XX PR 11-SEP-1997; 97US-0058523P.
XX PR 17-FEB-1998; 98US-0074894P.
XX PA (USSH ) US DEPT HEALTH & HUMAN SERVICE.
XX PI Berzofsky JA, Belyakov IM, Derby MA, Kelsall BL, Strober W;
XX WPI; 1999-243663/20.
XX PT Method for inducing a protective mucosal cytotoxic T lymphocyte immune
XX PT response.
XX PS Example 3; Page 85; 86pp; English.
XX CC This sequence represents a HIV-1 cluster peptide vaccine conjugate
XX CC (CLUVAC) sequence. The invention relates to a method for inducing a
XX CC protective mucosal cytotoxic T lymphocyte (CTL) response in a mammalian
XX CC subject, which comprises contacting a mucosal tissue of the subject with
XX CC a composition comprising a purified soluble antigen. The method can
XX CC induce a protective mucosal CTL response in a subject. The method can be
XX CC used for protection against e.g. hepatitis A virus, papilloma virus,
XX CC feline immunodeficiency virus, feline leukaemia virus, Listeria
XX CC monocytogenes, M. tuberculosis, M. leprae, or Giardia lamblia. The method
XX CC induces long-lasting protective mucosal immune responses. (Updated on 17-
XX CC OCT-2003 to standardise OS field)
XX SQ Sequence 15 AA;

    Query Match 100.0%; Score 39; DB 2; Length 15;
    Best Local Similarity 100.0%; Pred. No. 0.13;
    Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8
Db |||||
8 RAFVTIGK 15

RESULT 59
AAW72821
ID AAW72821 standard; peptide; 15 AA.
XX AC AAW72821;
XX DT 17-OCT-2003 (revised)
XX DT 13-JAN-1999 (first entry)
XX DE HIV-1 gp120 monoclonal antibody BAT123 residue 308 to 322.
XX KW HIV-1; gp120; epitope; monoclonal antibody; envelope; neutralise;
XX KW inhibit; infection; T-cell; inhibit syncytium formation; AIDS.
XX OS Human immunodeficiency virus 1.
XX PN US5834599-A.
XX PD 10-NOV-1998.
XX PF 04-MAR-1993; 93US-00026276.
XX PR 29-MAY-1987; 87US-00057445.
XX PR 24-DEC-1987; 87US-00137861.
XX PR 25-APR-1989; 89US-00343540.
XX PR 05-JUN-1992; 92US-00895197.
XX PA (TANO-) TANOX BIOSYSTEMS INC.
XX PI Sun BN, Fung SC, Kim YW, Sun CR, Chang NT, Chang T;
XX WPI; 1999-008810/01.
XX PT Antibody conjugate comprising monoclonal antibody - which binds to
XX PT epitope within amino acid residue of gp120 which neutralises HIV-1
XX PT conjugated with, e.g. cytotoxic agent.
XX PS Example 4; Col 25; 22pp; English.
XX CC The present invention describes an antibody conjugate comprising an
XX CC antibody (Ab) which binds to an epitope within amino acid residue 308-322
XX CC of gp120 and neutralises HIV-1, conjugated with a cytotoxic agent, an
XX CC anti-viral agent or an agent which facilitates passage through the blood
XX CC brain barrier. Also described is an antibody conjugate as above but where
XX CC the Ab binds to an epitope within amino acid residue 298-312 of gp12
XX CC which neutralises HIV-1. The present sequence represents an HIV-1 gp120
XX CC monoclonal antibody BAT123 residue 308 to 322 from an example of the
XX CC present invention. The Ab are monoclonal Ab which bind to the gp120
XX CC protein on the envelope of HIV-1. They inhibit the infection of T-cells
XX CC and also inhibit syncytium formation. The antibodies are group specific
XX CC and neutralise different strains and isolates of HIV-1. The antibodies
XX CC have a variety of uses, including the treatment and prevention of AIDS
XX CC and AIDS related complex. They are especially used to kill infected T-
XX CC cells. (Updated on 17-OCT-2003 to standardise OS field)
XX SQ Sequence 15 AA;

    Query Match 100.0%; Score 39; DB 2; Length 15;
    Best Local Similarity 100.0%; Pred. No. 0.13;
    Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8
Db |||||
8 RAFVTIGK 15

RESULT 60
AAW87620
ID AAW87620 standard; peptide; 15 AA.
XX AC AAW87620;
XX XX

```

DT 17-OCT-2003 (revised)  
 DT 20-MAR-2003 (revised)  
 DT 03-MAR-1999 (first entry)  
 XX  
 DE Epitope of HIV-1 gp120 protein which binds antibody BAT123.  
 XX  
 KW Epitope; gp120 protein; monoclonal antibody; HIV-1; antibody BAT123;  
 KW antibody BAT267; antibody BAT085; T cell infection inhibition;  
 KW syncytia formation; acquired immune deficiency syndrome; AIDS;  
 KW AIDS-related complex; passive immunisation; antiviral; cytotoxic;  
 KW viral load measurement; vaccine.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 XX US5854400-A.  
 PN 29-DEC-1998.  
 XX  
 PD 22-SEP-1992; 92US-00950571.  
 XX  
 PF 29-MAY-1987; 87US-00057445.  
 PR 24-DEC-1987; 87US-00137861.  
 PR 26-SEP-1991; 91US-00767533.  
 XX  
 PA (TANO-) TANOX INC.  
 XX  
 FI Fung MSC, Sun BNC, Sun CRY, Chang NT, Chang TW;  
 XX  
 DR WPI; 1999-095002/08.  
 XX  
 PT Monoclonal antibodies directed against regions of gp120 of human immune  
 PT deficiency virus-1 - are neutralising and able to inhibit infection of T  
 PT cells and formation of syncytia, used for treatment, prevention or  
 PT diagnosis of acquired immune deficiency syndrome.  
 XX  
 PS Claim 4; Col 8; 16pp; English.  
 XX  
 CC The present sequence represents an epitope of the gp120 protein of human  
 CC immune deficiency virus (HIV)-1. The sequence comprises amino acids 308  
 CC to 322 of gp120. The specification describes monoclonal antibodies which  
 CC bind to epitopes of the gp120 protein. Specifically, these antibodies are  
 CC designated BAT123, 267 and 085. Monoclonal antibodies neutralise HIV-1,  
 CC inhibiting both infection of T cells and formation of syncytia, so are  
 CC used to treat acquired immune deficiency syndrome (AIDS) and AIDS-related  
 CC complex, by passive immunisation, as carriers of cytotoxic or antiviral  
 CC agents, and in extracorporeal systems. They can also be used as  
 CC immunoassay reagents (for diagnosis or measurement of viral load) and to  
 CC screen for neutralising epitopes, potentially useful in vaccine  
 CC development. (Updated on 20-MAR-2003 to correct PR field.) (Updated on 17  
 CC -OCT-2003 to standardise OS field)  
 XX  
 SQ Sequence 15 AA;  
 Query Match 100.0%; Score 39; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.13; Mismatches 0; Gaps 0;  
 Matches 8; Conservative 0; Indels 0; Indels 0; Gaps 0;  
 QY 1 RAFVTIGK 8  
 Db |||||  
 8 RAFVTIGK 15  
 RESULT 61  
 ID AAY04680 standard; peptide; 15 AA.  
 XX  
 AC AAY04680;  
 XX  
 DT 17-OCT-2003 (revised)  
 DT 22-JUN-1999 (first entry)  
 XX  
 DE HIV-1 gp120 amino acids 308-322.  
 XX

KW gp120; HIV-1; monoclonal antibody; homology; antigen; breast; prostate;  
 KW gynecological; cancer; detection; diagnosis; cell membrane; chromatin.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN WO9909047-A1.  
 XX  
 PD 25-FEB-1999.  
 XX  
 PF 29-JUL-1998; 98WO-US015580.  
 XX  
 PR 29-JUL-1997; 97US-00902087.  
 XX  
 PA (RAKO/) RAKOWICZ-SZULCZYNSKA E M.  
 XX  
 PI Rakowicz-Szulczynska EM;  
 XX  
 DR WPI; 1999-190148/16.  
 XX  
 PT Use of HIV-1 polypeptides - for developing products for the detection and  
 PT treatment of breast, gynecological and prostate cancers.  
 XX  
 PS Disclosure; Page 39; 80pp; English.  
 XX  
 CC This peptide corresponds to amino acids 308-322 from the gp120 protein of  
 CC the human immunodeficiency virus type 1 (HIV-1). The peptide is used to  
 CC generate the monoclonal antibody Mab 5023. The invention relates to the  
 CC use of homology between HIV-1 antigens and breast, gynecological and  
 CC prostate cancer antigens to develop agents for use in the detection and  
 CC treatment of such cancers. The method especially uses an antibody which  
 CC recognises the p160, p80, p45 and p24 cell membrane proteins and the p24  
 CC chromatin protein. (Updated on 17-OCT-2003 to standardise OS field)  
 XX  
 SQ Sequence 15 AA;  
 Query Match 100.0%; Score 39; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.13; Mismatches 0; Gaps 0;  
 Matches 8; Conservative 0; Indels 0; Indels 0; Gaps 0;  
 QY 1 RAFVTIGK 8  
 Db |||||  
 8 RAFVTIGK 15  
 RESULT 62  
 ID AAY83916 standard; peptide; 15 AA.  
 XX  
 AC AAY83916;  
 XX  
 DT 12-SEP-2003 (revised)  
 DT 05-JUL-2000 (first entry)  
 XX  
 DE HIV-1 env T-cell epitope #1.  
 XX  
 KW Immunogen; particulate composition; immune response; assessment;  
 KW target skin site; skin immune reaction; HIV-1; immunocompetence;  
 KW antibody; cell mediated immunity; antigen exposure; allergy.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN WO200014547-A1.  
 XX  
 PD 16-MAR-2000.  
 XX  
 PF 03-SEP-1999; 99WO-GB002915.  
 XX  
 PR 04-SEP-1998; 98US-0099261P.  
 PR 10-JUN-1999; 99US-0139045P.  
 XX  
 PA (POWD-) POWDERJECT RES LTD.  
 XX  
 PI Sarphie DF, Roberts LK, Fuller DL;

XX WPI; 2000-257072/22.

XX Assessing an immune response against a selected agent in an individual

PT comprises accelerating a particulate composition, containing an

PT immunogenic compound from a selected agent, into the target skin site of

PT the individual.

XX Disclosure; Page 23; 41pp; English.

XX The invention relates to a method of using an immunogenic compound from a

CC selected agent in the manufacture of a particulate composition for

CC assessing an immune response against the selected agent in an individual.

CC The method comprises: (a) accelerating the particulate composition into a

CC target skin site in the individual; and (b) assessing the target site to

CC determine the presence or absence of a localized skin immune reaction,

CC where the presence of the immune reaction is indicative of an immune

CC response against the selected agent. Peptides AA83916-Y83925 represent

CC examples of peptides that could be used if the method is used to detect

CC human immunodeficiency virus type 1 (HIV-1). The method is useful for

CC assessing immunocompetence, antibody and cell mediated immunity, antigen

CC exposure, or allergic conditions in an individual. (Updated on 12-SEP-

CC 2003 to standardise OS field)

XX Sequence 15 AA;

QY Query Match 100.0%; Score 39; DB 3; Length 15;

Db Best Local Similarity 100.0%; Pred. No. 0.13;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8

Db 8 RAFVTIGK 15

RESULT 63

AAV66439

ID AAY66439 standard; peptide; 15 AA.

XX AC AAY66439;

XX 12-SEP-2003 (revised)

DT 22-FEB-2000 (first entry)

XX HLA-A2-binding HIV-1 GP120 CTL epitope #241.

DE HIV-1; MHC; major histocompatibility complex; Class I; HLA-A2;

KW human leukocyte antigen; CTL; cytotoxic T-cell; epitope; allele; binding;

KW conserved; genome; peptide; targeting; toxic; drug; antibody; antigen;

KW antiviral; molecular conjugate therapeutic; diagnosis; treatment;

KW pathogen; localisation; quantification; detection; infection;

KW drug resistance; immune response.

XX Human immunodeficiency virus 1.

OS WO9949893-A1.

XX 07-OCT-1999.

PD 31-MAR-1999; 99WO-US007111.

XX 31-MAR-1998; 98US-00052530.

XX (UYBO-) UNIV BOSTON.

PA Delisi C, Berzofsky J, Gulukota K, Vaccaro D, Weng Z, Zhang C;

PI WPI; 2000-038361/03.

XX Novel methods for designing molecular conjugate therapeutics which are

PT used for diagnosis, imaging and treatment against pathogens.

XX Example 3; Page 50; 62pp; English.

XX AAY66421-Y66453 are cytotoxic T-cell epitopes derived from conserved

CC portions of the HIV-1 genome that are presented by HLA-A2 MHC (major

CC histocompatibility complex) Class I molecules. The peptides are used to

CC construct targeting antigens comprising one or more peptides bound to

CC the corresponding MHC Class I molecule, which can be used to raise

CC antibodies. The antibody may then be used as a targeting vehicle to

CC deliver a potentially toxic drug to its target site of action, rather

CC than administering it systemically, which may result in adverse side

CC effects. The invention relates to improved methods for the design of

CC molecular conjugate therapeutics for the diagnosis and treatment of

CC infections caused by pathogens with a high mutation rate (such as HIV-1).

CC This method involves identifying conserved peptide-encoding regions among

CC the genomes of multiple variants of a pathogen, identifying the Class I

CC MHC molecules which occur with greatest frequency in a population of

CC interest (e.g., human sub-populations), and determining which of the

CC peptides bind to the Class I MHC molecules. The MHC-binding peptides and

CC the corresponding Class I MHC molecules are selected and used to

CC construct targeting antigens, which are in turn used to produce

CC targeting antibodies. The methods may be used in localisation,

CC quantification and in situ detection of specific peptide-MHC Class I

CC complexes and also to detect and treat viral infection. The methods of

CC the invention mitigate against the development of viral resistance to

CC drugs and to the immune response, as well as providing a solution for

CC targeting toxic compounds to destroy viruses sequestered in sites not

CC accessible to T cells. In addition, the methods eliminate the virus,

CC whereas current therapies only arrest viral replication. (Updated on 12-

CC SEP-2003 to standardise OS field)

XX Sequence 15 AA;

QY Query Match 100.0%; Score 39; DB 3; Length 15;

Db Best Local Similarity 100.0%; Pred. No. 0.13;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8

Db 8 RAFVTIGK 15

RESULT 64

AAV66455

ID AAY66455 standard; peptide; 15 AA.

XX AC AAY66455;

XX 12-SEP-2003 (revised)

DT 22-FEB-2000 (first entry)

XX HLA-A3-binding HIV-1 GP120 CTL epitope #257.

DE HIV-1; MHC; major histocompatibility complex; Class I; Caucasoid; HLA;

KW human leukocyte antigen; CTL; cytotoxic T-cell; Caucasian; epitope;

KW allele; binding; conserved; genome; peptide; targeting; toxic; drug;

KW antibody; antigen; antiviral; molecular conjugate therapeutic; diagnosis;

KW treatment; pathogen; localisation; quantification; detection; infection;

KW drug resistance; immune response.

XX Human immunodeficiency virus 1.

OS WO9949893-A1.

XX 07-OCT-1999.

PD 31-MAR-1999; 99WO-US007111.

XX 31-MAR-1998; 98US-00052530.

XX (UYBO-) UNIV BOSTON.

PA Delisi C, Berzofsky J, Gulukota K, Vaccaro D, Weng Z, Zhang C;

PI WPI; 2000-038361/03.

XX

XX Novel methods for designing molecular conjugate therapeutics which are  
 PT used for diagnosis, imaging and treatment against pathogens.  
 XX  
 XX Example 3; Page 51; 62pp; English.  
 XX  
 CC AAY66454-Y66458 are cytotoxic T-cell epitopes derived from conserved  
 CC portions of the HIV-1 genome that are presented by MHC (major  
 CC histocompatibility complex) Class I alleles found with high frequency  
 CC among Caucasoids in the USA. The peptides are used to construct  
 CC targeting antigens comprising one or more peptides bound to the  
 CC corresponding MHC Class I molecule, which can be used to raise  
 CC antibodies. The antibody may then be used as a targeting vehicle to  
 CC deliver a potentially toxic drug to its target site of action, rather  
 CC than administering it systemically, which may result in adverse side  
 CC effects. The invention relates to improved methods for the design of  
 CC molecular conjugate therapeutics for the diagnosis and treatment of  
 CC infections caused by pathogens with a high mutation rate (such as HIV-1).  
 CC This method involves identifying conserved peptide-encoding regions among  
 CC the genomes of multiple variants of a pathogen, identifying the Class I  
 CC MHC molecules which occur with greatest frequency in a population of  
 CC interest (e.g., human sub-populations), and determining which of the  
 CC peptides bind to the Class I MHC molecules. The MHC-binding peptides and  
 CC the corresponding Class I MHC molecules are selected and used to  
 CC construct targeting antigens, which are in turn used to produce  
 CC targeting antibodies. The methods may be used in localisation,  
 CC quantification and in situ detection of specific peptide-MHC Class I  
 CC complexes and also to detect and treat viral infection. The methods of  
 CC drugs and to the immune response, as well as providing a solution for  
 CC targeting toxic compounds to destroy viruses sequestered in sites not  
 CC accessible to T cells. In addition, the methods eliminate the virus,  
 CC whereas current therapies only arrest viral replication. (Updated on 12-  
 CC SEP-2003 to standardise OS field)  
 XX  
 XX Sequence 15 AA;  
 SQ

Query Match 100.0%; Score 39; DB 3; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.13;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
 DB 8 RAFVTIGK 15  
 |||||

RESULT 66  
 AAY85591  
 ID AAY85591 standard; peptide; 15 AA.  
 XX  
 AC AAY85591;  
 XX  
 DT 12-SEP-2003 (revised)  
 DT 01-FEB-2001 (first entry)  
 XX  
 DE HIV related peptide 13.  
 XX  
 XX Immunogenic particle; human immunodeficiency virus; HIV; cytostatic;  
 KW antiarthritic; antiinflammatory; cell-mediated immune response; cancer;  
 KW rheumatoid arthritis; inflammatory disorder; viral infection.  
 XX  
 XX Human immunodeficiency virus 1.  
 XX  
 FN WO200057919-A2.  
 XX  
 XX 05-OCT-2000.  
 XX  
 XX 23-MAR-2000; 2000WO-CA000319.  
 PF  
 XX  
 XX 25-MAR-1999; 99US-00276057.  
 PR  
 XX (SAPI-) SAPIENTIA THERAPEUTICS LTD.  
 PA (AGEN-) AGENE RES INST CO LTD.  
 PA

XX Sugimoto M, Arella M, Furuichi Y;  
 PI WPI; 2000-664891/64.  
 XX  
 DR Lipid based artificial particles useful for inducing a cell mediated  
 XX immune response in a subject having cancer, comprises a lipid based  
 XX matrix, glycolipids and peptide-lipid conjugates embedded in the matrix.  
 XX  
 PT Claim 10; Page 34; 39pp; English.  
 XX  
 CC This invention relates to artificial immunogenic particles comprising  
 CC glycolipids having a lipidic and a saccharide portion and peptide-lipid  
 CC conjugates having a lipidic and a peptide portion embedded into a lipid  
 CC based matrix. The peptide portion of the particle may be of viral origin.  
 CC Peptides AAY85579-Y85591 are human immunodeficiency virus (HIV) related  
 CC peptides which can be used as the peptide portion in an immunogenic  
 CC particle of the invention. The particles have cytostatic, antiarthritic  
 CC and antiinflammatory activity. The immunogenic particles are used for  
 CC inducing a cell-mediated immune response in a host directed towards the  
 CC peptide portion of the peptide-lipid conjugate. This means that the  
 CC particles may be used to treat diseases such as cancer, rheumatoid  
 CC arthritis, inflammatory disorders or viral infections such as HIV.  
 CC (Updated on 12-SEP-2003 to standardise OS field)  
 XX  
 XX Sequence 15 AA;  
 SQ

Query Match 100.0%; Score 39; DB 3; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.13;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
 DB 8 RAFVTIGK 15  
 |||||

RESULT 66  
 AAB15875  
 ID AAB15875 standard; peptide; 15 AA.  
 XX  
 AC AAB15875;  
 XX  
 DT 17-JAN-2001 (first entry)  
 XX  
 DE Human chemokine derived peptide #27.  
 XX  
 KW Macrophage recruitment; chemokine derivative; MCP-1; osteoporosis;  
 KW monocyte chemoattractant protein-1; inflammation; atherosclerosis; HIV;  
 KW AIDS; stroke; psoriasis; autoimmune disease; hypertension; endotoxaemia;  
 KW basophil-mediated disease; myocardial infarction; acute ischaemia;  
 KW rheumatoid arthritis; contraception.  
 XX  
 OS Synthetic.  
 XX  
 XX WO200042071-A2.  
 FN  
 XX 20-JUL-2000.  
 XX  
 XX 12-JAN-2000; 2000WO-US000821.  
 PF  
 XX 12-JAN-1999; 99US-00229071.  
 PR 17-MAR-1999; 99US-00271192.  
 PR 01-DEC-1999; 99US-00452406.  
 XX  
 PA (NEOR-) NEORX CORP.  
 XX  
 XX Grainger DJ, Tatalick LM;  
 PI WPI; 2000-499101/44.  
 XX  
 DR New peptide 3, amide and heterocyclic compounds and saccharide conjugates  
 PT used for inhibiting chemokine induced activity and for treating e.g.  
 PT stroke, vascular diseases, autoimmune diseases and tumor growth.

XX Disclosure; Fig 18; 387pp; English.

CC The present invention concerns the identification of a number of

CC chemokines which can be used to produce derivatives, agonists and

CC antagonists which are then useful in disease treatment. The chemokines

CC include sequences AAB15785-B15794, AAB15803-B15813 and AAB15831-B15848.

CC These chemokine derivatives can be used to treat diseases such as

CC autoimmune diseases, atherosclerosis, osteoporosis, HIV infection and

CC AIDS, psoriasis, inflammatory diseases, hypertension, basophil-mediated

CC diseases, endotoxaemia, myocardial infarction, acute ischaemia and

CC rheumatoid arthritis, and can be used to prevent strokes and as

CC contraceptives. The coding sequences for the chemokines can be used in

CC gene therapy for the same diseases, as well as in the production of

CC animal models

XX Sequence 15 AA;

SQ

Query Match 100.0%; Score 39; DB 3; Length 15;

Best Local Similarity 100.0%; Pred. No. 0.13;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8

DB 8 RAFVTIGK 15

|||||

RESULT 67

AM99083

ID AAM99083 standard; peptide; 15 AA.

XX

AC AAM99083;

XX

DT 11-SEP-2003 (revised)

DT 07-DEC-2001 (first entry)

XX

DE Vaccine related MHC ligand peptide SEQ ID NO:186.

XX

KW Glutamic acid; glutamine; vaccine; major histocompatibility complex; MHC;

KW immunomodulator; antiallergic; endocrine; neuroprotectant; virucidal;

KW bactericidal; antiparasitic; fungicidal; cytostatic; medicine;

KW pharmaceutical; immune disorder; immune deficiency; autoimmune;

KW hypersensitivity; allergy; graft rejection; infection; hormonal disorder;

KW central nervous system disease; cancer; melanoma; anti-melanoma vaccine;

KW human immunodeficiency virus.

XX

OS Human immunodeficiency virus 1.

XX

PN WO200170772-A2.

XX

PD 27-SEP-2001.

XX

PF 22-MAR-2001; 2001WO-FR000872.

XX

PR 23-MAR-2000; 2000FR-00003711.

XX

PA (FABR ) FABRE MEDICAMENT SA PIERRE.

XX

PI Klingner-Hamour C, Corvaia N, Beck A, Goetsch L;

XX

DR WPI; 2001-611470/70.

XX

PT Stabilized pharmaceutical containing N-terminal glutamic acid or

PT glutamine, useful e.g. in anti-melanoma vaccines, is an addition salt

PT with strong acid.

XX

PS Claim 9; Page 63; 149pp; French.

XX

CC The present invention describes a pharmaceutical compound (I) that

CC contains an N-terminal glutamic acid (Glu) or glutamine (Gln) residue in

CC the form of an addition salt with a strong, physiologically acceptable

CC acid (II). Also described are: (a) a pharmaceutical composition

CC containing at least one (I); (b) a vaccine containing at least one (I)

CC where this is a major histocompatibility complex (MHC) ligand (Ia); (c) a

CC method for in vitro diagnosis of diseases associated with the presence of

CC (Ia); (d) a kit for method (c) that includes a (Ia); and (e) a process

CC for preparing (I). (I) has immunomodulator, endocrine, antiallergic,

CC neuroprotectant, virucidal, bactericidal, antiparasitic, fungicidal and

CC cytostatic activities. (I) are useful, in human or veterinary medicine,

CC in pharmaceutical compositions (for treating immune disorders, e.g.

CC immune deficiency, autoimmune states, hypersensitivity, allergy, graft

CC rejection, infection, hormonal disorders and central nervous system

CC diseases), also, where (I) is a MHC ligand (Ia), in vaccines for

CC treatment or prevention of: (i) viral, bacterial, parasitic or fungal

CC infections; or (ii) of cancers. A particular application is in anti-

CC melanoma vaccines. (I) are also useful for in vitro diagnosis of diseases

CC associated with interactions between MHC and (I), e.g. melanoma and human

CC immunodeficiency virus infection. AAM98898 to AAM99592 represent peptides

CC which can be used in pharmaceutical compounds from the present invention.

CC (Updated on 11-SEP-2003 to standardise OS field)

XX

SQ Sequence 15 AA;

Query Match 100.0%; Score 39; DB 4; Length 15;

Best Local Similarity 100.0%; Pred. No. 0.13;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8

DB 7 RAFVTIGK 14

|||||

RESULT 68

AAB92345

ID AAB92345 standard; peptide; 15 AA.

XX

AC AAB92345;

XX

DT 22-JUN-2001 (first entry)

XX

DE Virus related peptide SEQ ID NO:1521.

XX

KW Protection; endogenous therapeutic peptide; peptidase; conjugation;

KW blood component; modification; succinimide; maleimido group; amino;

KW hydroxyl; thiol; hormone; growth factor; neurotransmitter.

XX

OS Homo sapiens.

OS Synthetic.

XX

PN WO200069900-A2.

XX

PD 23-NOV-2000.

XX

PF 17-MAY-2000; 2000WO-US013576.

XX

PR 17-MAY-1999; 99US-0134406P.

PR 10-SEP-1999; 99US-0153406P.

PR 15-OCT-1999; 99US-0159783P.

XX

PA (CONJ-) CONJUCHEM INC.

XX

PI Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudau K;

XX

DR WPI; 2001-112059/12.

XX

PT Modifying and attaching therapeutic peptides to albumin prevents

PT peptidase degradation, useful for increasing length of in vivo activity.

XX

PS Disclosure; Page 702; 733pp; English.

XX

CC The present invention describes a modified therapeutic peptide (I)

CC comprising a therapeutically active amino acid region (II) and a

CC reactive group (II) (e.g. succinimide and maleimido groups) attached to

CC a less therapeutically active amino acid region (IV), which covalently

CC bonds with amino/hydroxyl/thiol groups on blood components to form a

CC peptidase stabilised therapeutic peptide composed of 3-50 amino acids.

CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth  
 CC factors and neurotransmitters, to protect them from peptidase activity in  
 CC vivo for the treatment of various disorders. Endogenous therapeutic  
 CC peptides are not suitable as drug candidates as they require frequent  
 CC administration due to rapid degradation by peptidases in the body.  
 CC Modifying and attaching therapeutic peptides to albumin prevents or  
 CC reduces the action of peptidases to increase length of activity (half  
 CC life) and specificity as bonding to large molecules decreases  
 CC intracellular uptake and interference with physiological processes.  
 CC AAB90829 to AAB92441 represent peptides which can be used in the  
 CC exemplification of the present invention  
 XX Sequence 15 AA;

Query Match 100.0%; Score 39; DB 4; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.13;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
 |||||  
 DB 8 RAFVTIGK 15

RESULT 69  
 AAB92348  
 ID AAB92348 standard; peptide; 15 AA.

XX AC AAB92348;

XX DT 22-JUN-2001 (first entry)

XX DE Virus related peptide SEQ ID NO:1524.

XX KW Protection; endogenous therapeutic peptide; peptidase; conjugation;  
 XX KW blood component; modification; succinimidyl; maleimido group; amino;  
 XX KW hydroxyl; thiol; hormone; growth factor; neurotransmitter.

XX OS Homo sapiens.  
 XX OS Synthetic.

XX FN WC200069900-A2.

XX PD 23-NOV-2000.

XX FF 17-MAY-2000; 2000WO-US013576.

XX PR 17-MAY-1999; 99US-0134406P.

XX PR 10-SEP-1999; 99US-0153406P.

XX PR 15-OCT-1999; 99US-0159783P.

XX PA (CONJ-) CONJUCHEM INC.

XX PI Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudeau K;

XX WPI; 2001-112059/12.

XX PT Modifying and attaching therapeutic peptides to albumin prevents  
 XX PT peptidase degradation, useful for increasing length of in vivo activity.  
 XX PS Disclosure; Page 703; 733pp; English.

XX CC The present invention describes a modified therapeutic peptide (I)  
 CC comprising a therapeutically active amino acid region (III) and a  
 CC reactive group (II) (e.g. succinimidyl and maleimido groups) attached to  
 CC a less therapeutically active amino acid region (IV), which covalently  
 CC bonds with amino/hydroxyl/thiol groups on blood components to form a  
 CC peptide stabilised therapeutic peptide composed of 3-50 amino acids.  
 CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth  
 CC factors and neurotransmitters, to protect them from peptidase activity in  
 CC vivo for the treatment of various disorders. Endogenous therapeutic  
 CC peptides are not suitable as drug candidates as they require frequent  
 CC administration due to rapid degradation by peptidases in the body.  
 CC Modifying and attaching therapeutic peptides to albumin prevents or

CC reduces the action of peptidases to increase length of activity (half  
 CC life) and specificity as bonding to large molecules decreases  
 CC intracellular uptake and interference with physiological processes.  
 CC AAB90829 to AAB92441 represent peptides which can be used in the  
 CC exemplification of the present invention  
 XX Sequence 15 AA;

Query Match 100.0%; Score 39; DB 4; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.13;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
 |||||  
 DB 8 RAFVTIGK 15

RESULT 70

AAB68601

ID AAB68601 standard; peptide; 15 AA.

XX AC AAB68601;

XX DT 11-SEP-2003 (revised)

XX DT 25-APR-2001 (first entry)

XX DE HIV gp120 V3 loop peptide #1.

XX KW HIV gp120 V3 loop; liposome composition; HIV infection.

XX OS Human immunodeficiency virus 1.

XX PN US6180134-B1.

XX PD 30-JAN-2001.

XX PF 07-JUN-1995; 95US-00480332.

XX PR 23-MAR-1993; 93US-00035443.

XX PR 29-SEP-1994; 94US-00316436.

XX PA (SEQU-) SEQUUS PHARM INC.

XX PI Zalipsky S, Woodle MC, Martin FJ, Barenholz Y;

XX WPI; 2001-201897/20.

XX PT Liposome composition for use in treating septic shock comprises liposomes  
 XX PT having an outer surface layer of polyethylene glycol chains, and a  
 XX PT polypeptide or polysaccharide effector molecule.

XX PS Disclosure; Fig 13; 32pp; English.

XX CC The present invention relates to a liposome composition comprising  
 XX CC liposomes having an outer surface layer of polyethylene glycol chains,  
 XX CC each having a free distal end. A polypeptide or polysaccharide effector  
 XX CC molecule is covalently attached to a portion of the distal ends. The  
 XX CC effector interferes with specific binding of pathogen or cell in a  
 XX CC bloodstream to a target cell or cell matrix, and is rapidly removed by  
 XX CC renal clearance from the bloodstream when administered in free form. The  
 XX CC liposome composition may be used in treating a condition mediated by  
 XX CC binding a pathogen or cell in the bloodstream, to a target cell or cell  
 XX CC matrix. It can be used in treating septic shock, toxic shock, colonic  
 XX CC inflammation, leukaemic cell proliferation, or HIV infection. The present  
 XX CC sequence is a peptide of the V3 loop of HIV envelope protein gp120. This  
 XX CC peptide may be used in the composition of the present invention. gp120  
 XX CC binds to the CD4 receptor during HIV infection of lymphocytes. By  
 XX CC introducing the present peptide, the CD4 receptors are blocked, thereby  
 XX CC inhibiting HIV infection. (Updated on 11-SEP-2003 to standardise OS  
 XX CC field)

XX Sequence 15 AA;



Query Match 100.0%; Score 39; DB 4; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.13;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
| | | | |  
DB 8 RAFVTIGK 15

## RESULT 71

AAE15743  
ID AAE15743 standard; peptide; 15 AA.

AC AAE15743;

DT 26-MAR-2002 (first entry)

DE Human immunodeficiency virus (HIV) p18 peptide.

KW HIV; human immunodeficiency virus; cytostatic; immunosuppressive; p18;  
KW virucide; antibacterial; fungicide; protozoacide; antirheumatic; vaccine;  
KW antiinflammatory; antiarthritic; neuroprotective; rheumatoid arthritis;  
KW cancer; multiple sclerosis; immune response; vasotropic; gene therapy;  
KW autoimmune disease; vasculitis.

OS Human immunodeficiency virus.

PN WO200176643-A1.

PD 18-OCT-2001.

PF 06-APR-2001; 2001WO-US011372.

PR 07-APR-2000; 2000US-0195680P.

PA (BAYU ) BAYLOR COLLEGE MEDICINE.

PI Orson FM, Kinsey BM, Bhogal BS;

DR WPI; 2002-066308/09.

PT Composition for oral delivery of vaccines, comprises expression vector  
containing antigenic genomic sequence, bound to aggregated protein-  
polycationic polymer conjugate or suspension.

PS Example 10; Page 30; 145pp; English.

XX The invention relates to a composition comprising an expression vector  
bound to an aggregated protein-polycationic polymer conjugate or  
suspension. The expression vector contains a promoter polynucleotide  
sequence operatively linked to a polynucleotide sequence encoding an  
antigen which is a fragment of a gene or genome associated with an  
infectious disease, cancer and autoimmune disease such as rheumatoid  
arthritis, vasculitis, and multiple sclerosis, pathogenic genomes  
consisting of bacterium, fungus, protozoa and virus such as human  
immunodeficiency virus (HIV), herpes simplex virus (HSV), hepatitis C  
virus (HCV), influenza and respiratory syncytial virus (RSV), and  
optionally comprising a nucleotide sequence encoding a cytokine (or a  
cytokine expression vector), is useful for inducing an immune response  
(systemic and/or mucosal) in an organism. The cytokine expression vector  
contains a sequence for granulocyte macrophage-colony stimulating factor  
(GM-CSF) or interleukin-12 (IL-12). The polynucleotide sequences encoding  
the antigen and the cytokine are under transcriptional control of same or  
different promoter polynucleotide sequences. The expression vector, as a  
DNA vaccine is useful for treating a condition in an organism. The  
present sequence is human immunodeficiency virus (HIV) p18 peptide,  
related to the invention

SQ Sequence 15 AA;

Query Match 100.0%; Score 39; DB 5; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.13;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
| | | | |  
DB 8 RAFVTIGK 15

## RESULT 72

AAU96031  
ID AAU96031 standard; protein; 15 AA.

AC AAU96031;

DT 29-AUG-2003 (revised)

DT 02-JUL-2002 (first entry)

DE HIV epitope, HIV-1 gp120 H-2Dd, help, peptide sequence.

KW Vaccine; non-replicating; viral tubule; immunogen; antibody; BTV;  
KW Bluetongue virus; foot and mouth disease virus; FMDV; influenza virus;  
KW human immunodeficiency virus; HIV; protective immunity; epitope; TUB;  
KW virus-derived tubule; anti-HIV; virucide.

OS Human immunodeficiency virus 1.

PN WO200226254-A2.

PD 04-APR-2002.

PF 27-SEP-2001; 2001WO-US030464.

PR 27-SEP-2000; 2000US-0235614P.

PA (UABR-) UAB RES FOUND.

PI Roy P;

DR WPI; 2002-339987/37.

PT A vaccine, for inducing an antiviral immune response, comprises a non-  
replicating vaccine delivery vehicle (which comprises a non-infectious  
recombinant viral tubule) carrying one or more immunogens.

PS Claim 8; Page 39; 65pp; English.

XX The present invention relates to a new vaccine comprising a non-  
replicating vaccine delivery vehicle (which comprises a non-infectious  
recombinant viral tubule) carrying one or more immunogens. The invention  
is useful for inducing an immune response, preferably anti-viral, in a  
subject. The administration of the vaccine is preferably followed by  
administering one or more virus like particles carrying an immunogen. It  
is also useful for administering to a patient for generating antibodies  
specific for one or more immunogens, such as Bluetongue virus (BTV), foot  
and mouth disease virus (FMDV), influenza virus and human  
immunodeficiency virus (HIV). The invention provides an effective means  
of delivering multiple peptide components representing viral/tumour  
antigenic groups to elicit protective immunity, which has not previously  
been possible. The present amino acid sequence represents one of a  
collection (AAU96022-AAU96045) of HIV epitopes that were used in the  
methods of the invention as immunogens. These epitopes were used to  
construct chimeric NS1-TUBs (virus-derived tubules) which show  
immunogenicity. (Updated on 29-AUG-2003 to standardise OS field)

SQ Sequence 15 AA;

Query Match 100.0%; Score 39; DB 5; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.13;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
| | | | |  
DB 8 RAFVTIGK 15

RESULT 73  
AAU97690  
ID AAU97690 standard; peptide; 15 AA.  
XX  
AC AAU97690;  
XX  
DT 29-AUG-2003 (revised)  
DT 13-AUG-2002 (first entry)  
XX  
DE HIV CTL epitope peptide sequence.  
XX  
KW Adjuvant; acid-fast bacterium; acquired immunodeficiency syndrome;  
KW DNA vaccine; AIDS; hepatitis C virus; alpha-antigen gene; CTL;  
KW Mycobacterium kansasii; antigenic; immunogenic; epitope;  
KW human immunodeficiency virus; HIV.  
XX  
OS Human immunodeficiency virus 1.  
XX  
XX JP2002114708-A.  
XX  
XX 16-APR-2002.  
XX  
XX 06-OCT-2000; 2000JP-00307674.  
XX  
XX 06-OCT-2000; 2000JP-00307674.  
XX  
XX (PRIM-) PRIMUNE CORP YG.  
XX  
XX MPI; 2002-448884/48.  
XX  
XX An adjuvant of a DNA vaccine composed of alpha-antigen genes derived from  
PT acid-fast bacterium.  
XX  
XX Example 1; Page 7; 12pp; Japanese.  
XX  
XX The present invention relates to a new adjuvant of a gene derived from  
CC acid-fast bacterium for a DNA vaccine against AIDS (acquired  
CC immunodeficiency syndrome) and hepatitis C virus. The invention is  
CC composed of an effective component of alpha-antigen gene derived from  
CC acid-fast bacterium for DNA vaccine, particularly encoding for an alpha-  
CC antigen, particularly derived from Mycobacterium kansasii or its variant  
CC which has the same function, with an effective ingredient of an  
CC expression vector of the gene, used as an adjuvant, particularly a  
CC chimera DNA vaccine with a gene encoding for an antigenic peptide  
CC inserted, used for a DNA vaccine using a gene encoding for an immunogenic  
CC peptide derived from AIDS or hepatitis C virus. The adjuvant is useful  
CC for the treatment of AIDS or hepatitis C. The adjuvant enhances the  
CC immune inductive effect of the DNA vaccine. The present amino acid  
CC sequence represents the HIV (human immunodeficiency virus) CTL epitope  
CC peptide of the invention. (Updated on 29-AUG-2003 to standardise OS  
CC field)  
XX  
SQ Sequence 15 AA;  
Query Match 100.0%; Score 39; DB 5; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.13;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RAFVTIGK 8  
DB 8 RAFVTIGK 15  
RESULT 74  
ABG68654  
ID ABG68654 standard; peptide; 15 AA.  
XX  
AC ABG68654;  
XX  
DT 29-AUG-2003 (revised)  
DT 07-OCT-2002 (first entry)  
XX  
DE HIV-1 P18IIB peptide antigen.

XX  
KW Eliciting an immune response; peptide antigen; T-cell epitope;  
KW tumour antigen; viral antigen; non-viral vector; HIV-1;  
KW T-cell co-stimulatory molecule; human immunodeficiency virus;  
KW immunostimulant.  
XX  
OS Human immunodeficiency virus 1; (IIB isolate).  
XX  
PN US2002044948-A1.  
XX  
XX 18-APR-2002.  
XX  
XX 14-MAR-2001; 2001US-00810310.  
XX  
XX 15-MAR-2000; 2000US-0189396P.  
XX  
XX (KHLE/) KHLFIF S.  
XX  
XX (BERZ/) BERZOFKY J.  
XX  
XX Khleif S, Berzofsky J;  
XX  
XX MPI; 2002-507231/54.  
XX  
XX Administering a non-viral vector encoding a co-stimulatory molecule  
PT alongside a peptide or protein T cell epitope, elicits increased response  
PT to the antigen and is useful to enhance peptide and protein based  
PT vaccines and treatments.  
XX  
XX Disclosure; Page 7; 39pp; English.  
XX  
XX The present invention relates to a method for eliciting an immune  
CC response in a subject. The method comprises administering a peptide or  
CC protein antigen comprising T-cell epitope(s) (e.g. tumour antigen, viral  
CC or non-viral antigen) coordinately with a non-viral vector comprising a  
CC polynucleotide encoding a T-cell co-stimulatory molecule. Viral peptide  
CC antigens may include human immunodeficiency virus (HIV) antigen,  
CC hepatitis B virus (HBV), herpes simplex virus (HSV) or human papilloma  
CC virus (HPV). The method is useful to elicit an immune response in a  
CC subject, and to supplement and enhance peptide and protein based vaccines  
CC and treatment methods. ABG68640-ABG68700 represent HIV-1 peptide antigens  
CC useful in the method of the present invention. (Updated on 29-AUG-2003 to  
CC standardise OS field)  
XX  
SQ Sequence 15 AA;  
Query Match 100.0%; Score 39; DB 5; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.13;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RAFVTIGK 8  
DB 8 RAFVTIGK 15  
RESULT 75  
ABG68663  
ID ABG68663 standard; peptide; 15 AA.  
XX  
XX ABG68663;  
XX  
XX 29-AUG-2003 (revised)  
DT 07-OCT-2002 (first entry)  
XX  
XX HIV-1 P18 based peptide antigen #1.  
XX  
XX Eliciting an immune response; peptide antigen; T-cell epitope;  
KW tumour antigen; viral antigen; non-viral vector; HIV-1;  
KW T-cell co-stimulatory molecule; human immunodeficiency virus;  
KW immunostimulant.  
XX  
OS Human immunodeficiency virus 1; (IIB isolate).  
XX  
PN US2002044948-A1.

XX 18-APR-2002.  
 XX 14-MAR-2001; 2001US-00810310.  
 XX 15-MAR-2000; 2000US-0189396P.  
 XX (KHLE/) KHLRIF S.  
 XX (BERZ/) BERZOFISKY J.  
 XX Khleif S, Berzofsky J;  
 XX WPI; 2002-507231/54.  
 XX Administering a non-viral vector encoding a co-stimulatory molecule  
 PT alongside a peptide or protein T cell epitope, elicits increased response  
 PT to the antigen and is useful to enhance peptide and protein based  
 PT vaccines and treatments.  
 XX Disclosure; Page 7; 39pp; English.  
 XX The present invention relates to a method for eliciting an immune  
 CC response in a subject. The method comprises administering a peptide or  
 CC protein antigen comprising T-cell epitope(s) (e.g. tumour antigen, viral  
 CC or non-viral antigen) coordinately with a non-viral vector comprising a  
 CC polynucleotide encoding a T-cell co-stimulatory molecule. Viral peptide  
 CC antigens may include human immunodeficiency virus (HIV) antigen,  
 CC hepatitis B virus (HBV), herpes simplex virus (HSV) or human papilloma  
 CC virus (HPV). The method is useful to elicit an immune response in a  
 CC subject, and to supplement and enhance peptide and protein based vaccines  
 CC and treatment methods. ABG68640-ABG68700 represent HIV-1 peptide antigens  
 CC useful in the method of the present invention. (Updated on 29-AUG-2003 to  
 CC standardise QS field)  
 XX Sequence 15 AA;  
 XX  
 XX Query Match 100.0%; Score 39; DB 5; Length 15;  
 XX Best Local Similarity 100.0%; Pred. NO. 0.13;  
 XX Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX  
 XX QY 1 RAFVTIGK 8  
 XX |||||  
 XX Db 8 RAFVTIGK 15  
 XX  
 XX RESULT 76  
 XX AAE35161 standard; peptide; 15 AA.  
 XX ID AAE35161;  
 XX AC AAE35161;  
 XX DT 28-MAY-2003 (first entry)  
 XX DE HIV CTL epitope #6.  
 XX Cytolytic T lymphocyte; epitope; vaccine; prophylaxis; HIV infection;  
 XX human immunodeficiency virus; acquired immune deficiency syndrome; CTL;  
 XX gene therapy; AIDS.  
 XX Human immunodeficiency virus.  
 XX WO200294313-A2.  
 XX 28-NOV-2002.  
 XX 20-MAY-2002; 2002WO-GB002336.  
 XX 18-MAY-2001; 2001US-0291654P.  
 XX 18-MAY-2001; 2001US-0291655P.  
 XX (POWD-) POWDERJECT VACCINES INC.  
 XX (POWD-) POWDERJECT RES LTD.  
 XX

PI Fuller D, Fuller J, Haynes J, Shipley T;  
 XX WPI; 2003-148439/14.  
 XX Recombinant nucleic acid for the treatment and prophylaxis of acquired  
 PT immunodeficiency syndrome, comprises a nucleic acid sequence encoding an  
 PT antigen containing two or more cytolytic T lymphocyte (CTL) epitopes or  
 XX its analogs.  
 XX Claim 1; Col 78; 42pp; English.  
 XX The invention relates to a recombinant nucleic acid comprising a nucleic  
 CC acid sequence encoding an antigen containing two or more cytolytic T  
 CC lymphocyte (CTL) epitopes or its analogs. Sequences of the invention  
 CC are used in vaccines and are useful for the treatment and prophylaxis of  
 CC human immunodeficiency virus (HIV) infection, particularly acquired  
 CC immune deficiency syndrome (AIDS). The invention is also useful in gene  
 CC therapy. The present sequence is HIV CTL epitope. This sequence is used  
 CC in the exemplification of the invention  
 XX  
 XX Sequence 15 AA;  
 XX  
 XX Query Match 100.0%; Score 39; DB 6; Length 15;  
 XX Best Local Similarity 100.0%; Pred. NO. 0.13; 0; Indels 0; Gaps 0;  
 XX Matches 8; Conservative 0; Mismatches 0;  
 XX  
 XX QY 1 RAFVTIGK 8  
 XX |||||  
 XX Db 8 RAFVTIGK 15  
 XX  
 XX RESULT 77  
 XX ADN14074  
 XX ID ADN14074 standard; peptide; 15 AA.  
 XX AC ADN14074;  
 XX DT 17-JUN-2004 (first entry)  
 XX DE HIV helper T cell epitope #41.  
 XX HIV; antigen; epitope; T cell; MHC; major histocompatibility complex;  
 KW CTL; cytotoxic T lymphocyte; HIV infection; cancer; tuberculosis; tumour;  
 KW hepatitis; melanoma; breast cancer; Hodgkin lymphoma;  
 KW nasopharyngeal carcinoma; vaccine; immune response; hyaluronic acid; HA;  
 KW CD8+ T cell; CD4+ T cell; viral infection; bacterial infection;  
 KW fungal infection; parasitic infection.  
 XX Human immunodeficiency virus 1.  
 XX US2003049253-A1.  
 XX 13-MAR-2003.  
 XX 05-FEB-2002; 2002US-00062710.  
 XX 08-AUG-2001; 2001US-0310498P.  
 XX (LIQ/) LI P Q.  
 XX (CHU/) CHU Y.  
 XX (QIU/) QIU J.  
 XX Li Q, Chu Y, Qiu J;  
 XX WPI; 2003-540464/51.  
 XX Modulating an immune system response to an antigen in a mammal, comprises  
 PT administering a particle-free therapeutic comprising a hyaluronic acid  
 PT polymer analogue covalently linked to a peptide that comprises a T cell  
 PT epitope.  
 XX Disclosure; Page 12; 23pp; English.  
 XX

CC The invention relates to modulating an immune system response to an  
 CC antigen in a mammal comprising administering to the mammal a particulate  
 CC free therapeutic comprising a hyaluronic acid (HA) polymer analogue  
 CC covalently linked to at least one peptide that comprises a T cell epitope  
 CC recognised by a major histocompatibility complex molecule of the mammal.  
 CC The T cell epitope comprises a sequence of at least about eight amino  
 CC acids of the antigen. Also included are a method of improving major  
 CC histocompatibility complex (MHC) presentation of a T cell epitope of an  
 CC antigen in a mammal (comprising administering to the mammal the  
 CC conjugate). The T cell epitope is recognised by a major  
 CC histocompatibility complex (MHC) Class I molecule and by a CD8+ T cell of  
 CC the mammal, or an MHC Class II molecule and a CD4+ T cell of the mammal.  
 CC The immune system response comprises a cytotoxic T lymphocyte, a CD4+T  
 CC cell, or an antibody that recognises the antigen. The immune system  
 CC response to the antigen is increased after administration of the  
 CC conjugate, where the antigen is an antigen of a pathogenic agent or a  
 CC tumour cell. The immune system response to the antigen is decreased after  
 CC administration of the conjugate, where the antigen is an antigen of a  
 CC tissue or organ transplanted to the mammal. The composition and methods  
 CC are useful for modulating, i.e. enhancing or diminishing, an immune  
 CC system response to an antigen in a mammal. The composition is also useful  
 CC for improving major histocompatibility complex presentation of a T cell  
 CC epitope of an antigen in a mammal. The polymeric hyaluronic acid  
 CC conjugates are useful as peptide vaccines against an antigen, a  
 CC pathogenic agent such as viral, bacterial, fungal or parasitic protein,  
 CC or a tumour cell) in a mammal. The peptide vaccine compositions are  
 CC useful for treating or preventing diseases associated with any of the  
 CC antigens above e.g. HIV infection, cancer, tuberculosis, hepatitis,  
 CC melanoma, breast cancer, Hodgkin's lymphoma and nasopharyngeal carcinoma.  
 CC The peptide vaccine compositions of the present invention do not require  
 CC additional adjuvants, but still induce a stronger cell-mediated response  
 CC than peptide vaccines of the prior art. The present sequence is an HIV-1  
 CC derived epitope suitable for the vaccine of the invention.

XX Sequence 15 AA;

Query Match 100.0%; Score 39; DB 7; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.13;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
 |||||  
 Db 8 RAFVTIGK 15

RESULT 78

ADRO4041  
 ID ADRO4041 standard; peptide; 15 AA.

XX AC ADRO4041;

XX DT 04-NOV-2004 (first entry)

XX DE Immune response induction composition peptide adjuvant #2.

XX KW vaccine; virucide; antibacterial; immunosuppressive; antiallergic;  
 KW cytostatic; peptide adjuvant.

XX OS Synthetic.

XX PN WO2004067020-A1.

XX PD 12-AUG-2004.

XX PF 30-JAN-2004; 2004WO-KR000177.

XX PR 30-JAN-2003; 2003KR-00006393.

XX (UYPO-) UNIV POHANG SCI & TECHNOLOGY.  
 PA (GENE-) GENEXINE CO LTD.

XX PI Park K, Park S, Yang S, Lee C, Choi S, Ryu S, Kim Y, Sung Y;

DR WPI; 2004-580853/56.

XX New vaccine composition comprising a peptide adjuvant and a DNA vaccine  
 PT encoding an immunogenic protein, useful for inducing immune responses  
 PT against diseases e.g. HIV infection, autoimmune diseases, tuberculosis or  
 PT allergies.

XX Example 2; Page 21; 37pp; English.

XX The present invention relates to a vaccine composition comprising a  
 CC peptide adjuvant and a DNA vaccine encoding an immunogenic protein. The  
 CC composition may also comprise a gene of the influenza virus, preferably  
 CC the neuraminidase gene. The vaccine composition is useful for inducing  
 CC immune responses against diseases comprising HIV infection, herpes  
 CC simplex virus (HSV) infection, influenza virus infection, hepatitis A or  
 CC B infection, papillomavirus infection, tuberculosis, tumour growth,  
 CC autoimmune diseases or allergies. The present sequence is a peptide  
 CC adjuvant useful in the composition of the invention.

XX Sequence 15 AA;

Query Match 100.0%; Score 39; DB 8; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 0.13;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
 |||||  
 Db 8 RAFVTIGK 15

RESULT 79

AAR24939  
 ID AAR24939 standard; protein; 16 AA.

XX AC AAR24939;

XX DT 25-MAR-2003 (revised)

DT 09-DEC-1992 (first entry)

XX HIV peptide ENV 312-327.

XX KW Lipopeptide; lipoprotein; vaccine; cytotoxic T-cell; lymphocyte; HIV;  
 KW human immunodeficiency virus; AIDS; cancer; tumour cells; CB1; CB2; CB3.

XX OS Synthetic.

XX PN EP491628-A2.

XX PD 24-JUN-1992.

XX PF 18-DEC-1991; 91EP-00403446.

XX PR 18-DEC-1990; 90PR-00015870.

XX (INSP) INST PASTEUR LILLE.

PA (INRM) INSERM INST NAT SANTE & RECH MED.

PA (INSP) INST PASTEUR.

PI Boutillon C, Martinon F, Sergheraert C, Magne R, Gras-Masse H;

PI Gomard E, Tartar A, Levy JP;

XX WPI; 1992-209776/26.

XX Lipopeptide(s) which stimulate cytotoxic T-cells - for treating HIV,  
 PT parasitic infections and cancer.

XX Example; Page 18; 32pp; French.

XX The sequence is that of peptide ENV 312-327 derived from the HIV, it is  
 CC made by standard methods of solid phase peptide synthesis. It is used as  
 CC part of lipopeptides CB1, CB2 and CB3 which comprise the peptide, and one  
 CC or more chains derived from 10-20C fatty acids and/or modified steroid  
 CC groups, these being coupled to alpha or epsilon amino groups of the

CC peptide. The lipoproteins are useful in vaccines and acts by inducing  
 CC cytotoxic T lymphocytes against the HIV virus antigen from which the  
 CC peptide is derived. See also AAR24938 and AAR24940. (Updated on 25-MAR-  
 CC 2003 to correct PN field.)

XX SQ Sequence 16 AA;

Query Match 100.0%; Score 39; DB 2; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 0.14;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
 DB 9 RAFVTIGK 16

RESULT 80  
 AAW68326  
 ID AAW68326 standard; peptide; 16 AA.

XX AC AAW68326;  
 XX DT 25-MAR-2003 (revised)  
 XX DT 14-OCT-1998 (first entry)  
 XX DE MHC binding peptide Env.312-327.  
 XX KW Antigen; major histocompatibility complex; MHC; lymphocyte; detection;  
 XX KW immobilisation; cytotoxic T-cell; tumour; leukaemia; lymphoma;  
 XX KW viral infection.

XX OS Synthetic.  
 XX OS Human immunodeficiency virus 1.  
 XX PN WO9744667-A2.

XX PD 27-NOV-1997.  
 XX PF 21-MAY-1997; 97WO-FR000892.  
 XX PR 21-MAY-1996; 96US-00651925.  
 XX PA (INSP ) INST PASTEUR.  
 XX PA (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.  
 XX PI Langladedemoyen P, Lone Y, Kourilsky P, Abastado J;  
 XX WPI; 1998-018653/02.

XX Detection, purification and elimination of antigen-specific lymphocytes -  
 XX for producing cytotoxic T cells for immuno-therapy of cancers and viral  
 XX infection.

XX PS Disclosure; Page 27; 222pp; French.

XX Peptides AAW68301-W68384 are examples of antigens (Ag) which can be  
 CC loaded onto recombinantly produced major histocompatibility complex (MHC)  
 CC molecules in a method of detecting antigen-specific lymphocytes. The MHC-  
 CC antigen complex is then immobilised on a solid support and a sample  
 CC containing cells recognising the MHC-Ag complex may be isolated. This  
 CC peptide is derived from amino acids 312-327 of the human immunodeficiency  
 CC virus type 1 (HIV-1) env protein. A similar method is used to isolate,  
 CC purify or eliminate Ag-specific T-cells or to produce Ag-specific  
 CC cytotoxic T-cells (CTC). The method is also used to detect and quantify  
 CC tumour-specific T-cells and to generate CTC for specific killing of  
 CC tumour cells (solid tumours, leukaemia or lymphoma) by injection into a  
 CC human or animal, but also for treating viral infections. (Updated on 25-  
 CC MAR-2003 to correct PI field.)

XX SQ Sequence 16 AA;

Query Match 100.0%; Score 39; DB 2; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 0.14;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RAFVTIGK 8  
 DB 9 RAFVTIGK 16

RESULT 81  
 AAY68203  
 ID AAY68203 standard; peptide; 16 AA.

XX AC AAY68203;  
 XX DT 12-SEP-2003 (revised)  
 XX DT 13-APR-2000 (first entry)  
 XX DE Altered MHC determinant binding peptide SEQ ID NO:35.

XX KW MHC class I; major histocompatibility complex; microglobulin; antigen;  
 XX KW immune response; immunisation; AIDS; multiple sclerosis; toxic shock;  
 XX KW cancer; lupus erythematosus; snake bite; cytostatic; antiviral;  
 XX KW immunomodulatory; dermatological; immunosuppressive; antiinflammatory;  
 XX KW neuroprotective.

XX OS Human immunodeficiency virus 1.

XX PN US6011146-A.

XX PD 04-JAN-2000.

XX PF 07-JUN-1995; 95US-00481985.

XX PR 15-NOV-1991; 91US-00792473.

XX PR 05-DEC-1991; 91US-00801818.

XX PA (INSP ) INST PASTEUR.

XX PA (INRM ) INST NAT SANTE & RECH MEDICALE.

XX PI Kourilsky P, Mottez E, Abastado J;

XX WPI; 2000-125951/11.

XX New recombinant DNA encoding covalently linked form of major

XX PT histocompatibility complex Class I determinant, used for immune system

XX stimulation, e.g. for treating cancer.

XX PS Disclosure; Col 11; 88pp; English.

XX The present invention describes a recombinant DNA molecule (I) containing  
 CC a sequence (Ia) that encodes an altered MHC (major histocompatibility  
 CC complex ) Class I determinant (II) comprises a polypeptide with alpha1,  
 CC alpha2, alpha3 and beta2-microglobulin domains, in which alpha3 and beta2  
 CC are covalently linked, thorough C- and N-termini respectively, via a  
 CC nucleotide spacer sequence encoding a polypeptide. (II) includes an  
 CC antigen-binding site and when (II) and the antigen are associated they  
 CC are recognized by a mammalian T cell receptor (TCR). (I) are used to  
 CC produce (II) which are used to study functional interactions between the  
 CC various MHC domains. They can also be used to modulate (in vivo or in  
 CC vitro) the immune system by inducing an effector response (cytotoxicity,  
 CC antibody synthesis, phagocytosis) of immune system cells, typically for  
 CC treating, or immunising against; cancer, acquired immune deficiency  
 CC syndrome, lupus erythematosus, multiple sclerosis, toxic shock and snake  
 CC bite, but also for selective destruction of autoreactive cells,  
 CC diagnostically to assay T cell receptors and to raise specific antibodies  
 CC (useful for diagnosis, therapy, studying MHC-associated cellular  
 CC processes and for affinity purification). AAY57558 and AAY68186 to  
 CC AAY68316 are sequences used in the exemplification of the present  
 CC invention. (Updated on 12-SEP-2003 to standardise OS field)

XX SQ Sequence 16 AA;

Query Match 100.0%; Score 39; DB 3; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 0.14;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
 |||||  
 Db 9 RAFVTIGK 16

RESULT 82  
 AAY52857  
 ID AAY52857 standard; peptide; 16 AA.

XX AC AAY52857;

XX DT 14-FEB-2000 (first entry)

XX DE Altered MHC determinant binding peptide SEQ ID NO:35.

XX KW Major histocompatibility complex; MHC class I; MHC class II; antigen; immune response; diagnosis; antibody; immunisation; autoimmune disease; acquired immune deficiency syndrome; AIDS; cytostatic; dermatological; anti-inflammatory; neuroprotective; immunosuppressive; antithyroid; vaccine; lupus erythematosus; multiple sclerosis; thyroiditis; toxic shock; tumour; snakebite.

XX OS Synthetic.

OS Human immunodeficiency virus 1.

XX PN US5976551-A.

XX PD 02-NOV-1999.

XX PF 07-JUN-1995; 95US-00484905.

XX PR 15-NOV-1991; 91US-00792473.

XX PR 05-DEC-1991; 91US-00801818.

XX PA (INSP ) INST PASTEUR.

PA (INRM ) INSRM INST NAT SANTE & RECH MEDICALE.

XX PI Kourilsky P, Mottez E, Abastado J;

XX DR WPI; 2000-037081/03.

XX PT Composition containing an antigen and altered major histocompatibility Class II determinant, used to immunize against autoimmune diseases, e.g. acquired immune deficiency syndrome.

XX PS Claim 8; Col 11; 96pp; English.

XX CC The present invention describes a composition capable of eliciting anti-major histocompatibility (MHC) antibodies. The composition comprises an antigen associated with an altered MHC Class II determinant (I) comprising alpha1, alpha2, beta1 and beta2 polypeptide domains encoded by a mammalian MHC Class II locus covalently linked to form a polypeptide (I) containing beta2, alpha2, alpha1 and beta1 domains in sequence. The resulting Antigen-MHC complex is recognizable by the T cell receptor. The compositions are used for immunisation against, or treatment of, a wide range of autoimmune diseases, e.g. acquired immune deficiency syndrome (AIDS), lupus erythematosus, multiple sclerosis, thyroiditis, toxic shock, tumour and snakebite, depending on the nature of antigen. (I) is also used to analyse functional interactions between the various domains and for targeting lymphocyte receptors. Antibodies against (I) are produced by usual methods of immunisation or cell fusion, and may be humanised by standard methods. These antibodies are useful for diagnosis (detection or purification of MHC gene products), therapy (neutralising MHC on cell surfaces) and in the study of MHC and cellular processes. CC AAZ33240 to AA233242 and AAY52840 to AAY52970 represent sequences used in the exemplification of the present invention

XX SQ Sequence 16 AA;

Query Match 100.0%; Score 39; DB 3; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 0.14;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
 |||||  
 Db 9 RAFVTIGK 16

RESULT 83

AA58618  
 ID AAB58618 standard; peptide; 16 AA.

XX AC AAB58618;

XX DT 11-SEP-2003 (revised)

XX DT 13-MAR-2001 (first entry)

XX DE Altered MHC determinant binding peptide #17.

XX KW Major histocompatibility complex; MHC class I; immune; snake bite; T cell mediated autoimmune disease; AIDS; lupus erythematosus; toxic shock.

XX OS Human immunodeficiency virus; type 8.

XX PN US6153408-A.

XX PD 28-NOV-2000.

XX PF 09-JAN-1995; 95US-00370476.

XX PR 15-NOV-1991; 91US-00792473.

XX PR 05-DEC-1991; 91US-00801818.

XX PR 07-JUN-1993; 93US-00072787.

XX PR 07-SEP-1993; 93US-00117575.

XX PA (INSP ) INST PASTEUR.

PA (INRM ) INST NAT SANTE & RECH MEDICAL.

XX PI Abastado J, Kourilsky P, Casrouge A, Ojcius D, Lone Y, Mottez E;

XX DR WPI; 2001-060089/07.

XX PT New altered major histocompatibility complex (MHC) class I determinant useful for eliciting an immune response and/or for immunizing against or treating diseases, for example, multiple sclerosis, AIDS, toxic shock or snake bite.

XX PS Disclosure; Col 11; 105pp; English.

XX CC The present invention relates to a major histocompatibility complex (MHC) class I determinant, which has alpha 1 alpha 2 alpha 3 and beta2-microglobulin polypeptide domains encoded by a mammalian MHC class I locus. The MHC class I determinants are useful for activating the immune system and presenting antigens to the immune system to elicit an antigenic response. The MHC class I determinants are also useful for treating diseases, e.g. T cell mediated autoimmune disease, AIDS, lupus erythematosus, toxic shock or snake bite. The altered MHC class I determinants and compositions containing antigens bound to the determinants are useful in diagnostic applications, e.g. altered determinants may be used to target lymphocyte receptors and the resulting bound determinant can be assayed. (Updated on 11-SEP-2003 to standardise OS field)

XX SQ Sequence 16 AA;

Query Match 100.0%; Score 39; DB 4; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 0.14;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
 |||||  
 Db 9 RAFVTIGK 16

```

RESULT 84
AA42057
ID AAR42057 standard; peptide; 17 AA.
XX
XX AAR42057;
AC
XX
XX 25-MAR-2003 (revised)
DT 29-APR-1994 (first entry)
XX
XX Peptide CG-P18 from HIV-1 IIIB env protein V3 loop.
DE
XX
XX Human Immunodeficiency Virus type 1; envelope protein; immunogen;
KM vaccine; AIDS; peptide P18; epitope.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FT Peptide 3..17
FT /label= P-18
FT /note= "the Cys-Gly dipeptide is opt. absent"
FT
XX
XX W09319775-A1.
XX
XX 14-OCT-1993.
XX
XX 25-MAR-1993; 93WO-US002878.
XX
XX 31-MAR-1992; 92US-00860707.
XX
XX (MEDI-) MEDIMMUNE INC.
PA (USSA ) US DEPT ARMY.
XX
XX Alving CR, Cassatt D, Koenig S, Waseef N, White W;
PI WPI; 1993-336590/42.
XX
XX Inducing cytotoxic T lymphocyte response to HIV - with liposome contg.
PT Peptide or protein having CTL epitope of HIV and protein, also improving
PT humoral immunity, useful in vaccines.
XX
XX Claim 4; Page 16; 25pp; English.
XX
XX Peptide P-18, opt. with a Cys-Gly dipeptide attached at its N-terminus,
CC is the pref. peptide for use in raising a cytotoxic T lymphocyte response
CC against HIV. The peptide is encapsulated in a liposome for admin.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 17 AA:
SO
Query Match 100.0%; Score 39; DB 2; Length 17;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RAFVTIGK 8
DB 10 RAFVTIGK 17

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```

OS Human immunodeficiency virus 1.
XX
XX Key Location/Qualifiers
XX Modified-site 1
XX /note= "amidated residue"
XX Modified-site 17
XX /note= "this residue is -NH-CHR-CO-NH2, where R is a C14
XX side chain"
XX
XX EP945461-A1.
XX
XX 29-SEP-1999.
XX
XX 18-DEC-1991; 99EP-00105773.
XX
XX 18-DEC-1990; 90FR-00015870.
XX 18-DEC-1991; 91EP-00403446.
XX
XX (INSP ) INST PASTEUR LILLE.
PA (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.
XX
XX Bouillon C, Martinon F, Sergheraert C, Magne R, Gras-Masse H;
PI Gomard E, Tartar A, Levy J;
XX
XX WPI; 1999-553128/47.
XX
XX New lipopeptide inducers of cytotoxic T lymphocytes, useful as vaccine
PT against cancers, viruses, parasites and HIV-related conditions.
XX
XX Example 4; Page 19; 35pp; French.
XX
XX The specification describes lipopeptide that comprise a partial peptide
CC containing 10-40 amino acids and at least one antigenic determinant
CC specific for cytotoxic T lymphocytes. The lipopeptide comprises at least
CC one 10-20 carbon fatty acid derivatives and/or at least one modified
CC steroid group. The lipopeptides are useful for: the preparation of a
CC vaccine against HIV related conditions; immunizing a human or animal
CC against an antigen by inducing cytotoxic T-lymphocytes; immunizing a
CC human or animal against tumor cells; and immunizing human or animal
CC against pathogens (especially a virus e.g. HIV-1 and HIV-2, or
CC parasites). The present sequence represents a lipopeptide of the
CC invention, and comprises part of the HIV env protein
XX
XX Sequence 17 AA:
SO
Query Match 100.0%; Score 39; DB 2; Length 17;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RAFVTIGK 8
DB 9 RAFVTIGK 16

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RESULT 85
AA40414
ID AAY40414 standard; peptide; 17 AA.
XX
XX AAY40414;
AC
XX
XX 25-NOV-1999 (first entry)
DT
XX
XX Lipopeptide comprising a fragment of the HIV env protein.
DE
XX
XX Lipopeptide; antigen; cytotoxic T lymphocyte; steroid; vaccine;
KM HIV related condition; tumor cell; NP protein.
XX
XX Synthetic.
OS

```

```

RESULT 86
ADN14075
ID ADN14075 standard; peptide; 17 AA.
XX
XX ADN14075;
AC
XX
XX 17-JUN-2004 (first entry)
DT
XX
XX HIV helper T cell epitope #42.
DE
XX
XX HIV; antigen; epitope; T cell; MHC; major histocompatibility complex;
KM CTL; cytotoxic T lymphocyte; HIV infection; cancer; tuberculosis; tumour;
KM hepatitis; melanoma; breast cancer; Hodgkin lymphoma;
KM nasopharyngeal carcinoma; vaccine; immune response; hyaluronic acid; HA;
KM CD8+ T cell; CD4+ T cell; viral infection; bacterial infection;
XX fungal infection; parasitic infection.
XX
XX Human immunodeficiency virus 1.
OS

```

PN US2003049253-A1.  
 XX 13-MAR-2003.  
 XX 05-FEB-2002; 2002US-00062710.  
 PF 08-AUG-2001; 2001US-0310498P.  
 PR  
 XX (LIFO/) LI F O.  
 PA (CHUY/) CHU Y.  
 PA (QIUJ/) QIU J.  
 XX LI FO, CHU Y, QIU J;  
 XX WPI; 2003-540664/51.  
 DR  
 XX Modulating an immune system response to an antigen in a mammal, comprises  
 PT administering a particle-free therapeutic comprising a hyaluronic acid  
 PT polymer analogue covalently linked to a peptide that comprises a T cell  
 PT epitope.  
 XX  
 XX Disclosure; Page 12; 23pp; English.  
 XX  
 CC The invention relates to modulating an immune system response to an  
 CC antigen in a mammal comprising administering to the mammal a particle-  
 CC free therapeutic comprising a hyaluronic acid (HA) polymer analogue  
 CC covalently linked to at least one peptide that comprises a T cell epitope  
 CC recognised by a major histocompatibility complex molecule of the mammal.  
 CC The T cell epitope comprises a sequence of at least about eight amino  
 CC acids of the antigen. Also included are a method of improving major  
 CC histocompatibility complex (MHC) presentation of a T cell epitope of an  
 CC antigen in a mammal (comprising administering to the mammal the  
 CC histocompatibility complex (MHC) Class I molecule and by a CD8+ T cell of  
 CC the mammal, or an MHC Class II molecule and a CD4+ T cell of the mammal.  
 CC The immune system response comprises a cytotoxic T lymphocyte, a CD4+T  
 CC cell, or an antibody that recognises the antigen. The immune system  
 CC response to the antigen is increased after administration of the  
 CC conjugate, where the antigen is an antigen of a pathogenic agent or a  
 CC tumour cell. The immune system response to the antigen is decreased after  
 CC administration of the conjugate, where the antigen is an antigen of a  
 CC tissue or organ transplanted to the mammal. The composition and methods  
 CC are useful for modulating, i.e. enhancing or diminishing, an immune  
 CC system response to an antigen in a mammal. The composition is also useful  
 CC for improving major histocompatibility complex presentation of a T cell  
 CC epitope of an antigen in a mammal. The polymeric hyaluronic acid  
 CC conjugates are useful as peptide vaccines against an antigen, a  
 CC pathogenic agent such as viral, bacterial, fungal or parasitic protein,  
 CC or a tumour cell) in a mammal. The peptide vaccine compositions are  
 CC useful for treating or preventing diseases associated with any of the  
 CC antigens above e.g. HIV infection, cancer, tuberculosis, hepatitis,  
 CC melanoma, breast cancer, Hodgkin's lymphoma and nasopharyngeal carcinoma.  
 CC The peptide vaccine compositions of the present invention do not require  
 CC additional adjuvants, but still induce a stronger cell-mediated response  
 CC than peptide vaccines of the prior art. The present sequence is an HIV-1  
 CC derived epitope suitable for the vaccine of the invention.  
 XX  
 SQ Sequence 17 AA;  
 XX  
 Query Match 100.0%; Score 39; DB 7; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 0.15; Mismatches 0; Gaps 0;  
 Matches 8; Conservative 0; Indels 0; Gaps 0;  
 QY 1 RAFVTIGK 8  
 DB 7 RAFVTIGK 14  
 RESULT 87  
 AAR31277  
 ID AAR31277 standard; peptide; 18 AA.  
 XX  
 AC AAR31277;

XX 12-FEB-1993 (first entry)  
 DT HIV principal determinant peptide.  
 XX  
 DE AIDS; ARC; human immunodeficiency virus; vaccine; Neisseria;  
 XX meningitidis b; outer membrane protein complex; OMPC; PND135-18.  
 KW  
 XX Synthetic.  
 OS  
 FH Key Location/Qualifiers  
 FT Modified-site 1 /note="bonds to the OMPC of the conjugate via this site"  
 FT  
 XX EP467700-A.  
 XX 22-JAN-1992.  
 PD  
 XX 19-JUL-1991; 91EP-00306598.  
 PF  
 XX 19-JUL-1990; 90US-00555339.  
 PR 19-JUL-1990; 90US-00555966.  
 PR 19-JUN-1991; 91US-00715276.  
 PR 19-JUN-1991; 91US-00715278.  
 XX  
 PA (MERT ) MERCK & CO INC.  
 XX  
 PI Leanza WJ, Marburg S, Tolman RL, Emini EA;  
 XX WPI; 1992-026505/04.  
 DR  
 XX Claim 12; Page 56; 63pp; English.  
 PT  
 PT Conjugate proteins comprising HIV peptide components - useful for  
 PT preparing vaccines for e.g. AIDS or for treating infections.  
 XX  
 XX The invention relates to a co-conjugate comprising an immunogenic protein  
 PS or protein complex having a first set of covalent linkages to low  
 PS molecular weight moieties which have an anionic or polyanionic character  
 CC at physiological pH, and a second set of covalent linkages to peptides  
 CC comprising HIV principal neutralizing determinants (PND's) or  
 CC immunologically equivalent peptides. Preferably at least one set of the  
 CC covalent linkages is comprised of maleimide derivatives; the  
 CC (poly)anionic moiety is composed of one to five residues of the anionic  
 CC form of a carboxylic, sulphonic or phosphonic acid; the immunogenic  
 CC protein is the outer membrane protein complex (OMPC) of Neisseria  
 CC meningitidis b; and the PND peptide has a linear structure, a disulphide-  
 CC bonded cyclic structure, an amide-bonded cyclic structure or a thioether-  
 CC bonded cyclic structure. The present sequence (PND135-18) is an example  
 CC of a PND peptide component used in the co-conjugate. The co-conjugate is  
 CC useful for inducing anti-peptide immune response in mammals, for inducing  
 CC HIV-neutralizing antibodies in mammals, for formulating vaccines to  
 CC prevent HIV infection or disease, including AIDS, or for treating humans  
 CC afflicted with HIV infection or disease  
 XX  
 SQ Sequence 18 AA;  
 XX  
 Query Match 100.0%; Score 39; DB 2; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 0.16; Mismatches 0; Gaps 0;  
 Matches 8; Conservative 0; Indels 0; Gaps 0;  
 QY 1 RAFVTIGK 8  
 DB 8 RAFVTIGK 15  
 RESULT 88  
 AAR30032  
 ID AAR30032 standard; peptide; 18 AA.  
 XX  
 AC AAR30032;  
 XX  
 DT 25-MAR-2003 (revised)



DT 28-APR-1993 (first entry)  
 XX  
 DE HIV principle neutralising determinant 135-18.  
 XX  
 KW Human immunodeficiency virus; AIDS; PND; MIEP; conjugate;  
 KW major immune enhancing protein; vaccine; anti-HIV antibodies; immunogen;  
 KW passive immunisation.  
 XX  
 OS Human immunodeficiency virus.  
 XX  
 PN EP519554-A1.  
 XX  
 PD 23-DEC-1992.  
 XX  
 PF 11-JUN-1992; 92EP-00201693.  
 XX  
 PR 19-JUN-1991; 91US-00715273.  
 XX  
 PA (MERI ) MERCK & CO INC.  
 XX  
 PI Emlnt A, Liu MA, Marburg S, Tolman RL;  
 XX  
 DR WPI; 1992-425771/52.  
 XX  
 PT Conjugates of HIV-1 PND peptide(s) with the MIEP of Neisseria  
 PT meningitidis - useful as a vaccine for treating and preventing HIV-1  
 PT infection, e.g. AIDS in humans.  
 XX  
 PS Claim 9; Page 59; 66pp; English.  
 XX  
 CC The peptide is HIV principle neutralising determinant (PND) 135-18 and is  
 CC used as part of a conjugate comprising the major immune enhancing protein  
 CC (MIEP) of Neisseria meningitidis covalently linked to the HIV PND. The  
 CC conjugate may be used to prepare vaccines against HIV infections, e.g.  
 CC AIDS, as research tools for studying PND structure-function  
 CC relationships, or as immunogens for use in the passive immunisation of  
 CC humans. (Updated on 25-MAR-2003 to correct PN field.)  
 XX  
 SO Sequence 18 AA;  
 QY  
 Db 1 RAFTTICK 8  
 8 RAFTTICK 15  
 Query Match 100.0%; Score 39; DB 2; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 0.16;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 RESULT 89  
 AAR26713  
 ID AAR26713 standard; peptide; 18 AA.  
 XX  
 AC AAR26713;  
 XX  
 DT 09-FEB-1993 (first entry)  
 XX  
 DE HIV-PND-polysaccharide-protein conjugate vaccine.  
 XX  
 KW Human immunodeficiency virus; principal neutralizing determinant;  
 KW outer membrane protein complex; OMPc; Neisseria; AIDS; PND-135-18.  
 XX  
 OS Synthetic.  
 XX  
 PN Key  
 XX Modified-site 1 Location/Qualifiers  
 FT /note= "Joins onto polysaccharide-protein complex via  
 FT this site"  
 XX  
 XX EP468714-A.  
 XX  
 XX 29-JAN-1992.  
 XX

PF 19-JUL-1990; 90US-00555558.  
 XX  
 PR 19-JUL-1990; 90US-00555558.  
 PR 19-JUL-1990; 90US-00555574.  
 PR 19-JUN-1991; 91US-00715275.  
 PR 19-JUN-1991; 91US-00715277.  
 XX  
 PA (MERI ) MERCK & CO INC.  
 XX  
 PI Marburg S, Tolman RL, Emlnt EA;  
 XX  
 DR WPI; 1992-034437/05.  
 XX  
 PT HIV peptide-polysaccharide-protein conjugates - used in vaccines or to  
 PT produce antibodies to prevent or treat HIV infection.  
 XX  
 PS Claim 9; Page 57; 63pp; English.  
 XX  
 CC The invention relates to a conjugate of an HIV principal neutralising  
 CC determinant (PND), or an immunologically equivalent peptide (PEP),  
 CC covalently coupled to an immunogenic protein or protein complex through  
 CC an anionic polysaccharide linker. Pref. the immunogenic protein is the  
 CC outer membrane protein complex (OMPc) of Neisseria meningitidis B and the  
 CC PND peptide has a linear structure, a disulphide-bonded cyclic structure,  
 CC an amide-bonded cyclic structure or a thioether-bonded cyclic structure.  
 CC The present sequence (PND135-18) is an example of a PND peptide  
 CC component. The conjugates are used for inducing HIV-neutralising  
 CC antibodies or for making vaccines to prevent contraction of HIV infection  
 CC or disease. The antibodies can be used for passively protecting against  
 CC infection by HIV, or for protecting against proliferation of HIV post-  
 CC infection, or for treating AIDS, or in diagnostic assays  
 XX  
 SO Sequence 18 AA;  
 QY  
 Db 1 RAFTTICK 8  
 8 RAFTTICK 15  
 Query Match 100.0%; Score 39; DB 2; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 0.16;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 RESULT 90  
 AAR44190  
 ID AAR44190 standard; peptide; 18 AA.  
 XX  
 AC AAR44190;  
 XX  
 DT 24-OCT-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 20-MAY-1994 (first entry)  
 XX  
 DE SP120 V3 loop antigen B2.  
 XX  
 KW Antigen; B2; third variable domain; V3 loop; SP120; HIV-1; vaccine;  
 KW strain IIB; multiple antigenic peptide system; dendritic core;  
 KW lipophilic membrane anchoring group; mammal; humoral; immunisation;  
 KW cytotoxic T cell; CT; immune response; infection; Freund's adjuvant;  
 KW pathogen; HIV; influenza; malaria.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN W09322343-A1.  
 XX  
 PD 11-NOV-1993.  
 XX  
 PF 03-MAY-1993; 93WO-US004179.  
 XX  
 PR 01-MAY-1992; 92US-00877613.  
 XX  
 XX (UYRQ ) UNIV ROCKEFELLER.  
 XX

```

PI Tam JP;
XX
XX WPI, 1993-368723/46.
XX
XX New multiple antigen system esp. for use in HIV vaccines - contains
PT lipophilic membrane anchor imparting adjuvant activity, and peptide
PT antigens coupled to dendritic core.
XX
XX Example 3, Page 27, 55pp; English.
XX
XX The sequence given in AAR44190 is a peptide antigen, B2, which represents
CC residues 312-329 of the third variable domain (V3 loop) of gp120, of HIV-
CC 1 strain IIR. This sequence was attached to an amino acid linker (see
CC also AAR44191) in the production of a multiple antigenic peptide system.
CC This system comprises a dendritic core to which are covalently attached
CC at least one peptide, eg. an antigenic peptide, and a lipophilic membrane
CC anchoring group. This system may be injected into a mammal and elicits
CC both humoral and cytotoxic T cell (CTL) immune responses. This system may
CC be used to immunise against HIV infection. The lipophilic membrane
CC anchoring group provides efficient adjuvant activity without the toxicity
CC problems of Freund's adjuvant, while the dendritic structure allows
CC multiple antigens to be attached. Optionally the antigens may be derived
CC from different pathogens, providing vaccines which protect against more
CC than one disease, eg. HIV, influenza and malaria. (Updated on 25-MAR-2003
CC to correct PM field.) (Updated on 24-OCT-2003 to standardise OS field)
XX
XX Sequence 18 AA;
SQ
Query Match 100.0%; Score 39; DB 2; Length 18;
Best Local Similarity 100.0%; Pred. No. 0.16;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 RAFVTIGK 8
DB 11 RAFVTIGK 18
RESULT 91
AAR58548
ID AAR58548 standard; peptide; 18 AA.
XX
XX AAR58548;
XX
XX 16-OCT-2003 (revised)
XX 25-MAR-2003 (revised)
XX 29-MAR-1995 (first entry)
DE HIV-1 isolate IIRB V3 loop domain.
XX
XX HIV-1; V3 loop; multiple epitopes; AIDS; vaccine; MEAV; Escherichia coli;
XX PKK-MEAV.
XX
XX Human immunodeficiency virus 1.
XX
XX WO9418234-A1.
XX
XX 18-AUG-1994.
XX
XX 10-FEB-1994; 94WO-US001523.
XX
XX 10-FEB-1993; 93US-00015770.
XX
XX (UNBI-) UNITED BIOMEDICAL INC.
XX
XX Shen DF, Wang CY;
XX
XX WPI, 1994-279687/34.
XX
XX New recombinant proteins contg multiple antigenic determinants - linked
PT by flexible hinge domains.
XX
XX Disclosure, Page 36; 56pp; English.
XX

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CC MEAV gene (AA070535) encodes a portion of the CD4 binding domain
CC (AAR58550) of HIV env protein, the domain being capable of inducing a
CC helper T- cell response, and 5 peptide domains from the V3 loop of HIV-1
CC isolates MN, SC, RF, IIRB and WMJ2 (AAR58545-49), each peptide being
CC separated by a spacer domain (AAR58551). The gene was expressed in E.
CC coli BL21/pKK-MEAV for preparation of a multiple epitope AIDS vaccine
CC (AAR58552). (Updated on 25-MAR-2003 to correct PM field.) (Updated on 16-
CC OCT-2003 to standardise OS field)
XX
XX Sequence 18 AA;
SQ
Query Match 100.0%; Score 39; DB 2; Length 18;
Best Local Similarity 100.0%; Pred. No. 0.16;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 RAFVTIGK 8
DB 11 RAFVTIGK 18
RESULT 92
AAM63062
ID AAM63062 standard; peptide; 18 AA.
XX
XX AAM63062;
XX
XX 07-OCT-1998 (first entry)
XX
XX Human immunodeficiency virus type 1 (HIV 1) Env peptide 312-327.
DE
XX Superantigen; treatment; cancer; tumour-specific antigen;
XX autoimmune disease related antigen; infection; bacterial; viral;
XX eukaryotic; autoimmune disease; inhibit; pathological response;
XX immune response.
XX
XX Synthetic.
XX OS Human immunodeficiency virus 1.
XX
XX WO9826747-A2.
XX
XX 25-JUN-1998.
XX
XX 17-DEC-1997; 97WO-US023637.
XX
XX 17-DEC-1996; 96US-0033172P.
XX 17-APR-1997; 97US-0044074P.
XX
XX (TERM/) Terman D S.
XX
XX Terman DS;
XX
XX WPI, 1998-362497/31.
XX
XX Conjugates and polymers containing superantigen and therapeutic antigen -
XX for treatment of cancer, infection, autoimmune disease and graft
XX rejection, also treatment by administering lymphocytes treated in vitro
XX by these antigens.
XX
XX Example 2, Page 40; 139pp; English.
XX
XX Synthetic peptides AAM63049-85 are used, with superantigens, to exemplify
XX the invention. The specification describes a method for treatment of
XX cancer which comprises incubating lymphocytes with a tumour-specific
XX antigen or autoimmune disease related antigen and a superantigen. The
XX treated cells are then introduced into the patient. The superantigen and
XX the tumour-specific antigen or autoimmune disease related antigen can be
XX conjugated together. The products are used to treat cancer (carcinoma,
XX melanoma, lymphoma etc.), infections (bacterial, viral or eukaryotic) and
XX autoimmune disease (e.g. idiopathic thrombocytopenic purpura, rheumatoid
XX arthritis, systemic lupus erythematosus, multiple sclerosis etc.). The
XX antigens either induce an immune response or inhibit a pathological
XX response
XX

```

SQ Sequence 18 AA;  
 Query Match 100.0%; Score 39; DB 2; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 0.16;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTICK 8  
 |||||  
 DB 11 RAFTTICK 18

RESULT 93  
 AAY96191  
 ID AAY96191 standard; peptide; 18 AA.  
 AC AAY96191;  
 DT 19-DEC-2000 (first entry)  
 DE Glycoprotein gp120 glycosylated peptide.  
 KM gp120; MUC1; immunomodulator; glycopeptide; T-lymphocyte; T-cell;  
 KM proliferation; cancer; sarcoma; carcinoma; leukaemia; diagnosis; therapy;  
 KM vaccine; adjuvant; glycosylation.  
 OS Unidentified.  
 FH Key Location/Qualifiers  
 FT Modified-site 15 /note="O-glycosylated by GalNAc-beta-1-3Gal"  
 PN MO200052046-A1.  
 PD 08-SEP-2000.  
 PF 01-MAR-2000; 2000MO-GB000724.  
 PR 01-MAR-1999; 99GB-00004695.  
 PA (IMCR ) IMPERIAL CANCER RES TECHNOLOGY LTD.  
 PI Burchell J, Taylor-Papadimitriou J;  
 DR WPI; 2000-601868/57.  
 XX New immunomodulating glycopeptide that causes super-proliferation of T  
 PT cells, useful for treating cells in vitro, for diagnosing or treating  
 PT cancer (e.g. carcinoma or sarcoma) or as an adjuvant.  
 PS Disclosure; Page 24; 35pp; English.  
 XX The present sequence comprises a glycosylated fragment of gp120.  
 CC Glycopeptides comprising a fragment of the MUC1 repeat sequence,  
 CC especially having a Gal-GalNAc or GalNAc moiety on Thr-10 or Thr-17 (see  
 CC AAY96191-74), are useful as immunomodulators, causing super-proliferation  
 CC of T cells. Such glycopeptides can be used in the treatment or diagnosis  
 CC of a disease, in particular cancer, or as vaccine adjuvants. The  
 CC glycopeptides are particularly useful in manufacturing a medicament for  
 CC preventing or treating cancer by stimulating T cells whose receptors  
 CC recognize the glycopeptide. They are also useful for diagnosing or  
 CC treating cancer, e.g. carcinoma (e.g. mammary, lung, bladder or colon  
 CC carcinomas, or ovary and endometrial tumours), or sarcoma (e.g. soft  
 CC tissue and bone sarcomas, or leukaemia). Human peripheral blood  
 CC lymphocytes were used in a proliferation assay. The proliferation index  
 CC of the gp120 glycopeptide (taking the index as 1 when no glycopeptide was  
 CC present) was 1-1.7  
 XX Sequence 18 AA;  
 SQ

Query Match 100.0%; Score 39; DB 3; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 0.16;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTICK 8  
 |||||  
 DB 11 RAFTTICK 18

RESULT 94  
 ABB83113  
 ID ABB83113 standard; peptide; 18 AA.  
 AC ABB83113;  
 DT 05-AUG-2002 (first entry)  
 DE Lipopeptide #2 used in a vaccine.  
 KM Lipopeptide; cytostatic; virucide; anti-HIV; antiparasitic; vaccine;  
 KM immunisation; tumour; pathogen; virus; antiviral.  
 OS Synthetic.  
 FH Key Location/Qualifiers  
 FT Modified-site 1 /label=Xaa  
 FT /note="Xaa is optionally 2-acetylaminohexadecanoyl, 2,4  
 FT -bis(hexadecanoylamino)butyryl, or not present"  
 FT Modified-site 18 /label=Xaa  
 FT /note="Xaa is optionally 2-amino-hexadecanoamide or N-  
 FT epsilon-hexadecanoyl-Lys"  
 PN EP1065212-A2.  
 PD 03-JAN-2001.  
 PF 18-DEC-1991; 2000EP-00117513.  
 PR 18-DEC-1990; 90FR-00015870.  
 PR 18-DEC-1991; 91EP-00403446.  
 PR 18-DEC-1991; 99EP-00105773.  
 XX (INSP ) INST PASTEUR LILLE.  
 PA (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.  
 PI Boutillon C, Martinon F, Sergheraert C, Magne R, Gras-Masse H;  
 PI Gornard E, Tartar A, Levy J;  
 DR WPI; 2001-114040/13.  
 XX Vaccine for immunization against tumor cells or pathogens, especially  
 PT HIV, comprising peptide part, antigenic determinant specifically inducing  
 PT cytotoxic T-lymphocytes and N-palmitoyl-Lysine-derived chain(e).  
 PS Example 4; Page 17; 31pp; French.  
 CC The present sequence is a lipopeptide, which can be used for the  
 CC immunisation of humans or animals against tumour cells or pathogens,  
 CC specifically viruses, especially HIV-1 or HIV-2. The pathogens may also  
 CC include parasites. Examples illustrate immunisation of mice against  
 CC influenza, as well as HIV. The lipopeptide, with the appropriate  
 CC antigenic determinants, can induce a strong cytotoxic T-lymphocyte  
 CC response in a host organism against a wide range of pathogens. Addition  
 CC of an adjuvant is unnecessary  
 XX Sequence 18 AA;  
 SQ

Query Match 100.0%; Score 39; DB 4; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 0.16;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTICK 8  
 |||||  
 DB 10 RAFTTICK 17

```

RESULT 95
AAW24218
ID AAW24218 standard; peptide; 19 AA.
XX
XX AAW24218;
XX
XX 17-MAR-1998 (first entry)
XX
XX CD4+ T-lymphocyte epitope to HIV-1 V3 loop derived peptide V3-LAI-B.
XX
XX T-lymphocyte epitope; diagnosis; antigen; infectious disease;
XX delayed-type hypersensitivity assay; vaccine development.
XX
XX Synthetic.
XX Human immunodeficiency virus.
XX
XX Key Location/Qualifiers
XX Region 5..13
XX /note= "Mapped CD4+T-lymphocyte epitope of patient 2"
XX
XX MO927462-A2.
XX
XX 31-JUL-1997.
XX
XX 27-JAN-1997; 97WO-US001084.
XX
XX 26-JAN-1996; 96US-0010679P.
XX
XX (USSA ) US DEPT ARMY GOVERNMENT US ARMY MEDICAL.
XX
XX Sltz KV, Brix DL;
XX
XX WPI; 1997-393814/36.
XX
XX Peptide fragments containing antigen epitope(s) used to trace diseases -
XX used in a delayed-type hypersensitivity assay, for in vivo mapping of
XX human T-lymphocyte epitope(s) e.g. for diagnosis, vaccine development
XX etc.
XX
XX Disclosure; Page 6; 14pp; English.
XX
XX Peptide fragments AAW24217-20 were used to demonstrate a new method of
XX tracing sources of infectious diseases. The method comprises preparing a
XX short (9-50 amino acid) peptide containing at least one non-conserved
XX epitope of an organism, injecting a composition containing the peptide
XX intradermally into a test subject in a delayed-type hypersensitivity
XX (DTH) assay and observing the injection site at intervals for induration.
XX In this example CD4+ T-lymphocyte epitopes to the HIV-1 V3 loop were
XX mapped by existing in vitro techniques for two existing HIV infected
XX individuals and used to design peptides AAW24217-20. The method allows
XX the T-lymphocyte epitopes of a large antigen to be determined in vivo in
XX humans. The method is useful in medicine e.g. in diagnosis, monitoring
XX and treatment design for infectious disease exposure, active autoimmune
XX disease, allergic diseases and malignancy. It is especially useful for
XX tracing infectious diseases e.g HIV, particularly when a sequence is
XX present only in certain strains of an organism, and developing suitable
XX vaccines. Vaccinated individuals can also be tested to verify protection
XX against a particular strain. The method allows in vivo mapping of T-
XX lymphocyte epitopes, not previously possible. The method is simpler, more
XX rapid and more sensitive. It can also be applied in a variety of
XX environments e.g. undeveloped regions since specialist equipment is not
XX required
XX
XX Sequence 19 AA;
XX
XX Query Match 100.0%; Score 39; DB 2; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 0.17;
XX Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 RAFTYIGK 8
XX |||||
XX 4 RAFTYIGK 11

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RESULT 96
AAR04434
ID AAR04434 standard; protein; 20 AA.
XX
XX AAR04434;
XX
XX 09-SEP-2004 (revised)
XX 25-MAR-2003 (revised)
XX 20-SEP-1990 (first entry)
XX
XX Human immunodeficiency virus peptide 132.
XX
XX HIV-1IIB; peptide 132; principal neutralising domain; antibodies;
XX diagnosis; prophylaxis; therapy; AIDS.
XX
XX Synthetic.
XX
XX MO9003984-A.
XX
XX 19-APR-1990.
XX
XX 03-OCT-1988; 88US-00252949.
XX
XX 03-OCT-1988; 88US-00252949.
XX 01-JUN-1989; 89US-00355543.
XX 19-SEP-1989; 89US-00407663.
XX
XX (REPK ) REPLIGN CORP.
XX
XX Rusche JR, Putney SD, Javaherian K, Farley J, Grimalia R;
XX Lynn DU, Petrobre J;
XX
XX WPI; 1990-147824/19.
XX
XX Principal neutralising domain of HIV variants - used for producing
XX peptide(s) and antibodies for diagnosis, prophylaxis and/or therapy
XX therapy of HIV infection.
XX
XX Claim 8 (37); Page 76; 108pp; English.
XX
XX Peptide 132 comprises segments of the Principal Neutralising Domain
XX (envelope protein) from isolate HIV-1IIB. A Cysteine can be added, so
XX that the residues at or near both ends can form a disulfide bond, thus
XX giving the peptides a loop configuration. The loop configuration can be
XX utilised to enhance the immunogenic properties of the peptides. The
XX protein is capable of eliciting, and/or binding with, neutralising
XX antibodies. The neutralising domain is bounded by cysteine residues which
XX occur at positions 296 and 331. The peptides can be used as immunogens
XX or screening reagents to generate or identify poly- or monoclonal
XX antibodies. The 1st Tyr residue is an immunologically silent spacer. See
XX also AAR04427-R04506 and AAR04273-Q04279. (Updated on 25-MAR-2003 to
XX correct PR field.) (Updated on 25-MAR-2003 to correct PA field.) (Updated
XX on 25-MAR-2003 to correct PI field.)
XX
XX Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
XX
XX Sequence 20 AA;
XX
XX Query Match 100.0%; Score 39; DB 2; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 0.18;
XX Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 RAFTYIGK 8
XX |||||
XX 3 RAFTYIGK 10

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RESULT 97
AAR60203
ID AAR60203 standard; protein; 20 AA.
XX

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AC  AAR60203;
XX
XX  27-AUG-2003 (revised)
DT  25-MAR-2003 (revised)
DT  13-MAR-1995 (first entry)
XX
DE  HIV gp110 V3 loop molecular tag.
XX
KM  fusion protein; recombinant bispecific single chain antibody;
KM  human immunodeficiency virus; glycoprotein gp110; V3 loop.
XX
OS  Human immunodeficiency virus.
XX
XX  EP610046-A2.
XX
PD  10-AUG-1994.
XX
XX  31-JAN-1994; 94BP-00300692.
XX
XX  01-FEB-1993; 93US-00013420.
XX  13-SEP-1993; 93US-00121054.
XX
PA  (BRIM ) BRISTOL-MYERS SQUIBB CO.
XX
PI  Ledbetter JA, Gilliland IK, Hayden MS, Linsley PS, Bajorath U;
PI  Fell PH;
XX
DR  WPI, 1994-250885/31.
XX
XX  Expression vector encoding bispecific fusion protein - having binding
PT  domains for separate targets joined by helical peptide, useful e.g. for
PT  diagnosis and treatment.
XX
PS  Example 1, Page 12; 50pp; English.
XX
XX  A molecular tag was created by annealing two complementary 76mer
CC  oligonucleotides with cohesive end overhangs. AAG70167 is the sense
CC  strand and includes a BclI overhang, the HIV gp110 V3 loop coding
CC  sequence and a stop codon. The peptide encoded by the molecular tag
CC  (AAR60203), when part of a single chain fusion protein with binding
CC  regions from different antibodies, affected the avidity and binding
CC  specificity of the antibodies. For example, the tag failed to function
CC  properly when fused to I6 but performed successfully when fused to CD3.
CC  *Updated on 25-MAR-2003 to correct PN field.) (Updated on 27-AUG-2003 to
CC  correct OS field.)
XX
SQ  Sequence 20 AA;
XX
XX  Query Match 100.0%; Score 39; DB 2; Length 20;
XX  Best Local Similarity 100.0%; Pred. No. 0.18;
XX  Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY  1 RAFVTIGK 8
DB  12 RAFVTIGK 19
XX
RESULT 98
AAW76943
ID  AAW76943 standard; peptide; 20 AA.
XX
XX  AAW76943;
XX
XX  25-JAN-1999 (first entry)
XX
DE  Fusion immunoglobulin heavy chain HIV gp120 B cell epitope #83.
XX
XX  B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IGH;
KM  human immune deficiency virus; HIV; tolerance; treatment; therapy;
KM  prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;
KM  microbial infection; autoimmune disease; antibody; apoptosis;
KM  antiviral T cell immunity.
XX

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OS  Mus sp.
XX  Homo sapiens.
XX
XX  W09836087-A1.
XX
XX  20-AUG-1998.
XX
XX  13-FEB-1998; 98MO-US002766.
XX
XX  13-FEB-1997; 97US-0040581P.
XX
XX  (AMNA-) AMERICAN NAT RED CROSS.
XX
XX  Scott D, Zambidis E;
XX
XX  WPI, 1998-506315/43.
XX
XX  New fusion immunoglobulin heavy chain including gp120 epitopes and
PT  related complete antibodies - DNA, vectors and transformed cells, used to
PT  induce tolerance to the epitopes for treatment of human immune deficiency
PT  virus infection.
XX
XX  Disclosure; Page 39; 154pp; English.
XX
XX  This sequence is an epitope used in the construction of a novel fusion
CC  immunoglobulin heavy chain (IGH) protein with a mammalian, especially
CC  human, IGH chain fused in frame at its N-terminus to one or more human
CC  immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or
CC  transfected cells are used to tolerate subjects to gp120 epitopes and to
CC  maintain this tolerance, particularly for treatment of HIV infection,
CC  optionally together with other therapeutic/prophylactic agents such as
CC  vaccines, chemotherapeutic agents and immune response modifiers. Such
CC  proteins can be used against other diseases where an immune response is
CC  deleterious, e.g. microbial infection, tumours or autoimmune disease.
CC  Induction of tolerance suppresses production of antibodies against gp120,
CC  so prevents or inhibits 'bystander' apoptosis of uninfected T cells that
CC  are bound to gp120 protein, maximising induction of protective antiviral
CC  T cell immunity.
XX
SQ  Sequence 20 AA;
XX
XX  Query Match 100.0%; Score 39; DB 2; Length 20;
XX  Best Local Similarity 100.0%; Pred. No. 0.18;
XX  Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY  1 RAFVTIGK 8
DB  2 RAFVTIGK 9
XX
RESULT 99
AAW54930
ID  AAW54930 standard; peptide; 20 AA.
XX
XX  AAW54930;
XX
XX  25-SEP-1998 (first entry)
XX
DE  HIV gp120 envelope protein, peptide 127, analogue 127h.
XX
XX  Immunosorbent; immunoassay; HIV gp120; immunogen; antibody; Human.
XX
XX  Human immunodeficiency virus.
XX
XX  US5763160-A.
XX
XX  09-JUN-1998.
XX
XX  07-JUN-1995; 95US-00488252.
XX
XX  12-FEB-1988; 88US-00155321.
XX  01-MAR-1991; 91US-00663262.
XX  09-JUL-1991; 91US-00726605.
XX

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PR 19-OCT-1994; 94US-0026676.
XX
XX (UNBI-) UNITED BIOMEDICAL INC.
XX
XX Wang CY;
XX
XX WPI, 1998-347301/30.
XX
XX HIV gp120 peptides - useful as immunoassay reagents or vaccine
XX components.
XX
XX Example 8; Column 21/22; 34gp; English.
XX
XX Peptides AAW54903-W54941 can be used as an immunoadsorbent in an
XX immunoassay for detecting antibodies to HIV gp120, or as an immunogen for
XX eliciting antibodies to HIV in a mammal
XX
XX Sequence 20 AA;
XX
XX Query Match 100.0%; Score 39; DB 2; Length 20;
XX Best Local Similarity 100.0%; Pred. NO. 0.18; Mismatches 0; Indels 0; Gaps 0;
XX Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 RAFTVIGK 8
XX |||||
XX 13 RAFTVIGK 20
XX
XX RESULT 100
XX ADR1886
XX ID ADR1886 standard; peptide; 20 AA.
XX
XX ADR1886;
XX
XX 04-NOV-2004 (first entry)
XX
XX HIV-1 V3-IIIB related peptide SEQ ID NO:37.
XX
XX three-dimensional atomic structural conformation;
XX protein co-ordinate data; V3 loop peptide; HIV-1; envelope glycoprotein;
XX gp120; human monoclonal antibody 447-52D;
XX murine monoclonal antibody 0.5 beta; immunogen; immunogenic;
XX V3 loop epitope; HIV-1 infectivity inhibitor; anti-HIV; vaccine;
XX HIV-1 infection.
XX
XX Human immunodeficiency virus 1.
XX Synthetic.
XX
XX WO2004069863-A2.
XX
XX 19-AUG-2004.
XX
XX 04-FEB-2004; 2004WO-US003304.
XX
XX 04-FEB-2003; 2003US-0444682P.
XX
XX (UYNX) UNIV NEW YORK STATE.
XX (YEDA) YEDA RES & DEV CO LTD.
XX
XX Anglister J, Sharon M, Schapira M, Zolla-Pazner S, Rosen O;
XX WPI, 2004-625447/60.
XX
XX Composition for inhibiting HIV-1 infection, comprises isolated peptide
XX molecule that mimics atomic structural conformation of V3 loop peptide of
XX HIV-1 envelope glycoprotein that is bound to, and constrained by human
XX monoclonal antibody.
XX
XX Example 1; SEQ ID NO 37; 127pp; English.
XX
XX The present invention describes a composition (C1) which comprises an
XX isolated peptide molecule or isostere that mimics the three-dimensional
XX (3D) atomic structural conformation of the V3 loop peptide of the HIV-1

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CC envelope glycoprotein gp120 that is bound to, and constrained by, human
CC monoclonal antibody (Mab) 447-52D, murine Mab 0.5 beta or an antigen
CC binding fragment of the Mab, where the constrained V3 loop peptide
CC differs in conformation from the same V3 loop peptide when it is in free
CC form. Also described: (1) identifying (M1) from several existing
CC compounds a molecule that is useful as an HIV-1 V3 loop immunogen or as
CC an inhibitor of binding of HIV-1 to a chemokine receptor/HIV-1 co-
CC receptor on the surface of a receptor-bearing target cell; (2) designing
CC a molecule that is useful as an HIV-1 V3 loop immunogen or as an
CC inhibitor of binding of HIV-1 to a chemokine receptor/HIV-1 co-receptor
CC on the surface of a receptor-bearing target cell; (3) a composition (C2)
CC that is useful as an HIV-1 V3 loop immunogen or as an inhibitor of
CC binding of HIV-1 to a chemokine receptor/HIV-1 co-receptor on the surface
CC of a receptor-bearing target cell; (4) an immunogenic composition (C3)
CC for induction of an anti-HIV-1 antibody response specific for a V3 loop
CC epitope, comprising (C1) and an excipient; (5) a pharmaceutical
CC composition (C4) useful for blocking the interaction of HIV-1 with an R5
CC or X4 co-receptor and thereby inhibiting HIV-1 infectivity, comprising
CC (C1) and a carrier or excipient; (6) a computing platform for generating
CC a 3D model of a constrained HIV V3 view peptide; (7) a computer generated
CC model representing the conformationally constrained structure of a V3
CC loop peptide that is bound to 447-52D or 0.5beta Mab or its antigen
CC binding fragments, comprising a 3D atomic structure defined by NC; and
CC (8) a computer readable medium (CM) comprising, in a retrievable format,
CC data that includes a set of structure coordinates defining a 3D structure
CC of a V3 loop peptide that is conformationally constrained by being bound
CC to 447-52D or 0.5beta Mab or its antigen binding fragment. (C1) has anti-
CC HIV activities, and can be used in vaccines, and as an inhibitor of
CC binding of HIV-1 to chemokine receptor/HIV-1 co-receptor. (C1) is useful
CC for in vivo inhibition of HIV-1 infection. (C1) or (C2) is useful for
CC producing a medicament utilised for treating or preventing HIV-1
CC infection. (C3) or (C4) is useful for inducing in a subject an anti-HIV-1
CC neutralising antibody response specific for a V3 loop epitope. (C4) is
CC useful for preventing an HIV-1 infection in an uninfected subject at risk
CC for such infection or for inhibiting viral spread and disease progression
CC in an infected subject. The present sequence represents a peptide used in
CC the exemplification of the present invention.
XX
XX Sequence 20 AA;
XX
XX Query Match 100.0%; Score 39; DB 8; Length 20;
XX Best Local Similarity 100.0%; Pred. NO. 0.18;
XX Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 RAFTVIGK 8
XX |||||
XX 13 RAFTVIGK 20
XX
XX Db
XX
XX RESULT 101
XX AAR93073
XX ID AAR93073 standard; peptide; 21 AA.
XX
XX AAR93073;
XX
XX 27-SEP-1996 (first entry)
XX
XX Antigenic peptide CLR73.
XX
XX Antigen; non-infectious; retrovirus; antigenic marker; immune response;
XX long terminal repeat; gag; pol; env; AIDS; HIV; antibody; therapy.
XX
XX Synthetic.
XX
XX WO9605292-A1.
XX
XX 22-FEB-1996.
XX
XX 15-AUG-1995; 95WO-CA000483.
XX
XX 15-AUG-1994; 94US-00290105.
XX
XX (CONN-) CONNAUGHT LAB LTD.
XX

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XX  
PI Rovinski B, Cao S, Yao F, Persson R, Klein MH;  
XX  
DR WPI; 1996-139690/14.  
XX  
PT Antigenically marked non-infectious retrovirus-like particles - used to  
PT vaccinate against, and in the treatment of, AIDS and AIDS related  
PT conditions.  
XX  
PS Example 4; Page 38; 75pp; English.  
XX  
AA AAR93071-R93074 represent sequences used as antigenic marker epitopes in  
CC a non-infectious retrovirus-like particle of the invention. This sequence  
CC represents the antigenic peptide CTRB73. The retrovirus-like particle  
CC contains 1-4 repeats of this sequence (or AAR93061). The coding sequence  
CC for the retroviral particle of the invention comprises a modified  
CC retroviral genome deficient in long terminal repeats, but containing the  
CC gag, pol and env genes in their natural genomic arrangement, along with  
CC the antigenic marker sequence. The retroviral particle can be used in an  
CC immunogenic composition capable of eliciting a retroviral specific immune  
CC response. The composition is for parenteral or mucosal administration.  
CC Preferably oral, anal, vaginal or intranasal administration. The  
CC composition can be used for immunising a host to produce a retroviral  
CC specific immune response, such as against AIDS and AIDS related  
CC conditions. The particles may also be used in the prophylactic (or  
CC curative) treatment of AIDS and related conditions, by acting to displace  
CC the binding of the HIV virus to human or animal cells, or by disrupting  
CC the 3-dimensional organisation of the virus. The particle can also be  
CC used to identify antibodies specifically reacting with retrovirus  
CC antigens  
XX  
SQ Sequence 21 AA;  
XX  
QY Query Match 100.0%; Score 39; DB 2; Length 21;  
Best Local Similarity 100.0%; Pred. No. 0.19;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
Db 1 RARFTTICK 8  
14 RARFTTICK 21

RESULT 102  
ID AAM34475 standard; peptide; 21 AA.  
XX  
AC AAM34475;  
XX  
DT 11-MAY-1998 (first entry)  
XX  
DE Acceptor peptide HIV-V3.  
XX  
KM UDP-N-acetyl-alpha-D-galactosamine;  
KM polypeptide N-acetylglucosaminyltransferase; GalNAc-T3; human;  
KM glycosylation; HIV-V3.  
XX  
OS Synthetic.  
OS Human immunodeficiency virus.  
XX  
PN MO9743405-A1.  
XX  
PD 20-NOV-1997.  
XX  
PF 15-MAY-1997; 97WO-DK000226.  
XX  
PR 15-MAY-1996; 96US-00648298.  
XX  
PA (CLAU/) CLAUSEN H.  
PA (BENN/) BENNETT E F.  
XX  
PI Clausen H, Bennett EP;  
XX  
DR WPI; 1998-008874/01.

XX  
PT New isolated N-acetyl-galactosaminyl-transferase enzyme - used for the  
PT production of glycosylated polypeptide(s) having particular enzymatic,  
PT immunogenic or other biological or physical properties.  
XX  
PS Example 2; Page 30; 70pp; English.  
XX  
CC Acceptor peptides Muc2, Muc5c (see AAM34474) and HIV-V3 (see AAM34475)  
CC were used to study the acceptor substrate specificity of the novel human  
CC N-acetylglucosaminyltransferase GalNAc-T3 (see AAM34470). Expression of  
CC a soluble GalNAc-T3 construct in Sf9 cells resulted in significant  
CC increases in GalNAc-transferase activity in the culture medium of  
CC infected cells compared to uninfected controls or cells infected with the  
CC host blood group O2 gene. GalNAc-transferase activity with the Muc2  
CC acceptor peptide was increased 20-fold, and activity with the HIV-V3  
CC peptide was increased nearly 100-fold. In contrast, expression of GalNAc-  
CC T1 and -T2 constructs only increased the GalNAc-transferase activity  
CC toward Muc2 and Muc5c peptide substrates. This illustrates the unique  
CC acceptor substrate specificity of GalNAc-T3. The enzyme is used in  
CC claimed methods for the glycosylation of peptides and proteins and for  
CC producing vaccines by modifying the O-glycosylation pattern of eukaryotic  
CC cells  
XX  
SQ Sequence 21 AA;  
XX  
QY Query Match 100.0%; Score 39; DB 2; Length 21;  
Best Local Similarity 100.0%; Pred. No. 0.19;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
Db 1 RARFTTICK 8  
10 RARFTTICK 17

RESULT 103  
ID AAM79180 standard; peptide; 21 AA.  
XX  
AC AAM79180;  
XX  
DT 25-JAN-1999 (first entry)  
XX  
DE Fusion immunoglobulin heavy chain HIV gp120 T cell epitope #58.  
XX  
KM B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IGH;  
KM human immune deficiency virus; HIV; tolerance; treatment; therapy;  
KM prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;  
KM microbial infection; autoimmune disease; antibody; apoptosis;  
KM antiviral T cell immunity.  
XX  
OS Mus sp.  
OS Homo sapiens.  
XX  
PN MO9836087-A1.  
XX  
PD 20-AUG-1998.  
XX  
PF 13-FEB-1998; 98WO-US002766.  
XX  
PR 13-FEB-1997; 97US-0040581P.  
XX  
PA (AMNA-) AMERICAN NAT RED CROSS.  
XX  
PI Scott D, Zambidis E;  
XX  
DR WPI; 1998-506315/43.  
XX  
PT New fusion immunoglobulin heavy chain including gp120 epitopes and  
PT related complete antibodies - DNA, vectors and transformed cells, used to  
PT induce tolerance to the epitopes for treatment of human immune deficiency  
PT virus infection.  
XX  
PS Disclosure; Page 50; 154pp; English.

XX This sequence is an epitope used in the construction of a novel fusion  
 CC immunoglobulin heavy chain (IGH) protein with a mammalian, especially  
 CC human, IGH chain fused in frame at its N-terminus to one or more human  
 CC immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or  
 CC transduced cells are used to tolerate subjects to gp120 epitopes and to  
 CC maintain this tolerance, particularly for treatment of HIV infection,  
 CC optionally together with other therapeutic/prophylactic agents such as  
 CC vaccines, chemotherapeutic agents and immune response modifiers. Such  
 CC proteins can be used against other diseases where an immune response is  
 CC deleterious, e.g. microbial infection, tumours or autoimmune disease.  
 CC Induction of tolerance suppresses production of antibodies against gp120,  
 CC so prevents or inhibits 'bystander' apoptosis of uninfected T cells that  
 CC are bound to gp120 protein, maximising induction of protective antiviral  
 CC T cell immunity

SQ Sequence 21 AA;

Query Match 100.0%; Score 39; DB 2; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 0.19;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
 DB 6 RAFTYICK 13

RESULT 104  
 AAW76901  
 ID AAW76901 standard; peptide: 21 AA.  
 XX AAW76901;  
 AC AAW76901;  
 XX 25-JAN-1999 (first entry)  
 DT  
 XX Fusion immunoglobulin heavy chain HIV gp120 T cell epitope #20.  
 DE  
 XX B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IGH;  
 KM human immune deficiency virus; HIV; tolerance; treatment; therapy;  
 KM prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;  
 KM microbial infection; autoimmune disease; antibody; apoptosis;  
 KM antiviral T cell immunity.  
 XX  
 OS Mus sp.  
 OS Homo sapiens.  
 XX  
 PN WO9836087-A1.  
 XX  
 PD 20-AUG-1998.  
 XX  
 PF 13-FEB-1998; 98WC-US002766.  
 XX  
 PR 13-FEB-1997; 97US-0040581P.  
 XX  
 PA (AMNA-) AMERICAN NAT RED CROSS.  
 XX  
 PI Scott D, Zambidis B;  
 XX  
 DR WPI; 1998-506315/43.  
 XX  
 PT New fusion immunoglobulin heavy chain including gp120 epitopes and  
 PT related complete antibodies - DNA, vectors and transformed cells, used to  
 PT induce tolerance to the epitopes for treatment of human immune deficiency  
 PT virus infection.  
 XX  
 PS Claim 11, Page 120; 154pp; English.  
 XX  
 CC This sequence is an epitope used in the construction of a novel fusion  
 CC immunoglobulin heavy chain (IGH) protein with a mammalian, especially  
 CC human, IGH chain fused in frame at its N-terminus to one or more human  
 CC immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or  
 CC transduced cells are used to tolerate subjects to gp120 epitopes and/or  
 CC maintain this tolerance, particularly for treatment of HIV infection.

CC optionally together with other therapeutic/prophylactic agents such as  
 CC vaccines, chemotherapeutic agents and immune response modifiers. Such  
 CC proteins can be used against other diseases where an immune response is  
 CC deleterious, e.g. microbial infection, tumours or autoimmune disease.  
 CC Induction of tolerance suppresses production of antibodies against gp120,  
 CC so prevents or inhibits 'bystander' apoptosis of uninfected T cells that  
 CC are bound to gp120 protein, maximising induction of protective antiviral  
 CC T cell immunity

SQ Sequence 21 AA;

Query Match 100.0%; Score 39; DB 2; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 0.19;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
 DB 6 RAFTYICK 13

RESULT 105  
 AAW75478  
 ID AAW75478 standard; peptide: 21 AA.  
 XX AAW75478;  
 AC AAW75478;  
 XX 17-OCT-2003 (revised)  
 DT 20-MAR-2003 (revised)  
 DT 27-APR-1999 (first entry)  
 XX  
 DE HIV-1 strain HXB2 gp120 V3 loop peptide amino acids 302-322.  
 XX  
 KM V3 loop; gp120 protein; HIV-1; retrovirus-like particle; genome; HIV-2;  
 KM long terminal repeat; LTR; chimeric; envelope; glycoprotein; HTLV-I;  
 KM HTLV-II; vaccine; human T-lymphotropic virus.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN US5866137-A.  
 XX  
 PD 02-FEB-1999.  
 XX  
 PF 30-MAY-1995; 95US-00453745.  
 XX  
 PR 15-JUN-1992; 92US-00839751.  
 PR 09-JUN-1993; 93US-00073526.  
 XX  
 PA (CONN-) CONNUGHT LAB LTD.  
 XX  
 PI Klein MH, Cao SX, Haynes J, Rovinski B;  
 XX  
 DR WPI; 1999-141864/12.  
 XX  
 PT Immunogenic retrovirus-like particle - with chimeric HIV-1 envelope  
 PT protein containing heterologous retroviral amino acid sequence.  
 XX  
 PS Example 4; Col 7-8; 12pp; English.  
 XX  
 CC This sequence represents a peptide from the V3 loop of the gp120 protein  
 CC from the human immunodeficiency virus type 1 (HIV-1) strain HXB2. The  
 CC peptide is used to determine antibody responses after immunisation with a  
 CC self-assembled, non-infectious, non-replicating, immunogenic, retrovirus-  
 CC like particle. The retrovirus-like particle comprises a modified HIV  
 CC genome devoid of long terminal repeats (LTRs) and contains a nucleotide  
 CC sequence coding for a chimeric envelope glycoprotein. The chimeric  
 CC envelope glycoprotein has the HIV-1 gp120 conserved region 2 and a second  
 CC retroviral envelope amino acid sequence from a heterologous strain of HIV  
 CC -1, HIV-2, HTLV-I or HTLV-II inserted into the first retroviral envelope  
 CC amino acid sequence (see AAW75474-W75477). The novel retrovirus-like  
 CC particle is useful in vaccines against HIV. (Updated on 20-MAR-2003 to  
 CC correct PA field.) (Updated on 17-OCT-2003 to standardise OS field)

SQ Sequence 21 AA;



Query Match 100.0%; Score 39; DB 2; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 0.19;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTICK 8  
 |||||  
 DB 14 RAFTTICK 21

RESULT 106  
 AAY16052  
 ID AAY16052 standard; peptide; 21 AA.  
 XX  
 AC AAY16052;  
 XX  
 DT 17-OCT-2003 (revised)  
 DT 20-MAR-2003 (revised)  
 DT 04-AUG-1999 (first entry)  
 XX  
 DE HIV-1 isolate HXB2 gp120 peptide.  
 XX  
 KM Retrovirus-like particle; modified HIV genome;  
 KM chimeric envelope glycoprotein; HIV-1 gp120; conserved region 2; HIV-1;  
 KM HIV-2; HTLV-I; HTLV-II; vaccine.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN US5912338-A.  
 PD 15-JUN-1999.  
 XX  
 PF 30-MAY-1995; 95US-00452520.  
 XX  
 PR 15-JUN-1992; 92US-00839751.  
 PR 09-JUN-1993; 93US-00073526.  
 XX  
 PA (ROVI/) ROVINSKI B.  
 PI Cao SX, Klein MH, Haynes J, Rovinski B;  
 DR WPI; 1999-357220/30.  
 XX  
 PT Immunogenic retrovirus like particles comprising modified HIV genomes,  
 PT useful as vaccines against HIV.  
 XX  
 PS Example 4; Col 9-10; 12pp; English.  
 XX  
 CC The specification describes a nucleic acid molecule encoding a self  
 CC assembled, non-infectious, non-replicating, immunogenic, retrovirus-like  
 CC particle. The retroviral particle comprises a modified HIV genome devoid  
 CC of long terminal repeats containing a nucleotide sequence coding for a  
 CC chimeric envelope glycoprotein which has a first (a) and second (b)  
 CC retroviral envelope amino acid sequence, where (a) contains the HIV-1  
 CC gp120 conserved region 2, and (b) contains a retroviral envelope amino  
 CC acid sequence of a heterologous strain of HIV-1, HIV-2, HTLV-I or HTLV-II  
 CC inserted into (a) at an endogenous site (BgIII and StuI). (b) may  
 CC comprise peptides AAY16049-51 and AAY16055. The nucleic acids are useful  
 CC as vaccines against HIV. The present sequence is used in the course of  
 CC the invention. (Updated on 20-MAR-2003 to correct PR field.) (Updated on  
 CC 17-OCT-2003 to standardise OS field)  
 XX  
 SQ Sequence 21 AA;  
 QY Query Match 100.0%; Score 39; DB 2; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 0.19;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTICK 8  
 |||||  
 DB 14 RAFTTICK 21

RESULT 107  
 AAW85568  
 ID AAW85568 standard; peptide; 21 AA.  
 XX  
 AC AAW85568;  
 XX  
 DT 20-MAR-2003 (revised)  
 DT 24-FEB-1999 (first entry)  
 XX  
 DE Human immunodeficiency virus type 1 derived peptide.  
 XX  
 KM Immunoassay diagnostic kit; antibody detection;  
 KM chimeric envelope protein; HIV-1 gp120 conserved region 2; HIV-1; HIV-2;  
 KM HTLV-I; HTLV-II.  
 XX  
 OS Synthetic.  
 OS Human immunodeficiency virus 1.  
 XX  
 PN US5849475-A.  
 PD 15-DEC-1998.  
 XX  
 PF 30-MAY-1995; 95US-00452503.  
 XX  
 PR 15-JUN-1992; 92US-00839751.  
 PR 09-JUN-1993; 93US-00073526.  
 XX  
 PA (CONN-) CONNACHT LAB LTD.  
 PI Klein MH, Cao SX, Haynes J, Rovinski B;  
 DR WPI; 1999-069713/06.  
 XX  
 PT Immunoassay diagnostic kit for detecting antibodies - comprising chimeric  
 PT retrovirus-like particles.  
 XX  
 PS Example 4; Col 9-10; 12pp; English.  
 XX  
 CC The present sequence represents a Human immunodeficiency virus type 1  
 CC derived peptide. The peptide is used in the immunoassay diagnostic kit of  
 CC the invention. The specification describes an immunoassay diagnostic kit  
 CC for detecting antibodies in a sample, which comprises an antigen  
 CC consisting of a self-assembled, non-infectious, non-replicating,  
 CC immunogenic, retrovirus-like particle encoded by a modified HIV genome  
 CC that is devoid of long terminal repeats and contains a nucleotide  
 CC sequence coding for a chimeric envelope protein having a first amino acid  
 CC sequence containing HIV-1 gp120 conserved region 2 and a second amino  
 CC acid sequence containing an envelope sequence of a heterologous strain of  
 CC HIV-1, HIV-2, HTLV-I or HTLV-II. (Updated on 20-MAR-2003 to correct PR  
 CC field.) (Updated on 20-MAR-2003 to correct PA field.)  
 XX  
 SQ Sequence 21 AA;  
 QY Query Match 100.0%; Score 39; DB 2; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 0.19;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTICK 8  
 |||||  
 DB 14 RAFTTICK 21

RESULT 108  
 AAB15012  
 ID AAB15012 standard; peptide; 21 AA.  
 XX  
 AC AAB15012;  
 XX  
 DT 07-DEC-2000 (first entry)  
 DE Peptide p18 derived from V3 loop of HIV IIIB group 120 protein.  
 XX  
 KM HIV; immune; diphosphonate.

```

XX OS Human immunodeficiency virus.
XX XX WO200044758-A1.
XX PN 03-AUG-2000.
XX PD 01-FEB-2000; 2000WO-US002755.
XX PF 01-FEB-1999; 99US-0118131P.
XX PR (EISA ) EISAI CO LTD.
XX PA Hawkins LD, Ishizaka ST, Lewis M, McGuinness P, Nault A, Rose J;
XX PI Rossignol DP;
XX DR WPI; 2000-514809/46.
XX PT New diphosphonate compounds, useful as immunological adjuvants for
XX PT stimulating an immune response to an antigen.
XX PS Example 8; Page 86; 130pp; English.
XX CC The present invention relates to diphosphonate compounds useful as
XX CC immunological adjuvants. The compounds can be used for stimulating an
XX CC immune response to an antigen. The present sequence is an immunogenic
XX CC peptide used to test the ability of the compounds to cause an increase in
XX CC the immune response. The peptide consists of an amino terminal cysteine
XX CC residue, a glycine/alanine/glycine spacer and amino acids 308-322 of the
XX CC V3 loop of HIV IIIB gp120 protein
XX SQ Sequence 21 AA;

Query Match          100.0%; Score 39; DB 3; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.19;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RAFVTIGK 8
Db      13 RAFVTIGK 20

RESULT 109
AAU08699
ID AAU08699 standard; peptide; 21 AA.
XX AC AAU08699;
XX DT 18-DEC-2001 (first entry)
XX DE Retrovirus-like particle CULB73 containing a V3 (HXB2) antigenic marker.
XX XX Human immunodeficiency virus; HIV; retroviral antigen; gag; pol; env;
XX KM immune response; antigenic marker; antigenic epitope; retrovirus.
XX OS Human immunodeficiency virus.
XX OS Synthetic.
XX PN US6291157-B1.
XX PD 18-SEP-2001.
XX PF 23-FEB-1998; 98US-00027955.
XX PR 23-FEB-1998; 98US-00027955.
XX PA (CONN-) CONNAUGHT LAB LTD.
XX PI Rovinski B, Cao S, Yao F, Persson R, Klein ME;
XX DR WPI; 2001-595518/67.
XX PT Differentiating between infection by human immunodeficiency virus (HIV)

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PT and antiserum generated by immunization against HIV, comprises use of non
PT -infectious, non-replicating HIV-like particle with heterologous,
PT antigenic anchor sequence.
XX XX Disclosure; Col 17; 28pp; English.
XX PS The invention relates to a method for determining the presence of
XX CC antibodies specifically reactive with HIV retroviral antigens in a
XX CC sample. This involves contacting a sample suspected of containing HIV-
XX CC specific antibodies with a non-infectious, non-replicating, immunogenic
XX CC HIV-like particle as an antigen. The antigen comprises an assembly of a
XX CC gag gene product, a pol gene product and a modified env gene product
XX CC containing a non-retroviral heterologous, antigenic, anchor sequence that
XX CC replaces the endogenous anchoring functions of the env gene product. The
XX CC method detects immune complex formation between HIV-specific antibodies
XX CC and the antigens. The method is also useful for identifying antiserum
XX CC generated by immunisation with an immunogenic composition capable of
XX CC eliciting HIV-specific immune response. The antigenic marker may comprise
XX CC at least one antigenic epitope from another virus. This sequence
XX CC represents a retrovirus-like particle containing an antigenic marker
XX SQ Sequence 21 AA;

Query Match          100.0%; Score 39; DB 4; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.19;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RAFVTIGK 8
Db      14 RAFVTIGK 21

RESULT 110
AAR42153
ID AAR42153 standard; peptide; 22 AA.
XX AC AAR42153;
XX DT 24-OCT-2003 (revised)
XX DT 25-MAR-2003 (revised)
XX DT 27-APR-1994 (first entry)
XX DE gp120 V3 loop sequence of HIV-1 IIIB isolate.
XX XX Human immunodeficiency virus; antigen; EISA; recombinant antibody;
XX KM HIV-neutralising monoclonal antibody; immunoglobulin; AIDS;
XX KM acquired immune deficiency syndrome; chimeric antibody;
XX KW surface glycoprotein gp120; V3 loop; epitope mapping.
XX OS Human immunodeficiency virus 1; (IIIB isolate).
XX PN WO9319785-A1.
XX PD 14-OCT-1993.
XX PF 23-MAR-1993; 93WO-US002629.
XX PR 01-APR-1992; 92US-00861701.
XX PA (MERT ) MERCK & CO INC.
XX PI Emml BA, Conley AJ, Mark GE, Johnson LS, Pfarr DS;
XX DR WPI; 1993-336600/42.
XX PT New recombinant human antibody - with HIV neutralising activity against
XX PT at least two isolates, useful for preventing or treating infection in
XX PT diagnosis, etc.
XX PS Example 16; Page 100; 154pp; English.
XX CC Antibodies able to neutralise more than one HIV-1 isolate are claimed.
XX CC The gp120 V3 loop sequences from different isolates comprising the

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CC Principal Neutralising Determinant motif GPCR are given in AAR42153-  
 CC R42151. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 24-OCT-  
 CC 2003 to standardise OS field)

XX Sequence 22 AA;

Query Match 100.0%; Score 39; DB 2; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 0.2;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
 |||||  
 DB 13 RAFTYICK 20

RESULT 111  
 AAR57470  
 ID AAR57470 standard; protein; 22 AA.

XX AAR57470;

XX 25-MAR-2003 (revised).

DT 21-MAR-1995 (first entry)

XX HIV BRU V3 loop peptide.

XX Immunisation; vaccine; therapy; prophylaxis; defective gene;  
 KM non-functional gene; template; antisense; ribozyme; bupivacaine;  
 KM human immunodeficiency virus; acquired immune deficiency syndrome; HIV;  
 AIDS; ss.

XX Synthetic.

XX WO9416737-A1.

XX 04-AUG-1994.

XX 26-JAN-1994; 94WO-US000899.

XX 26-JAN-1993; 93US-00008342.

XX 11-MAR-1993; 93US-00029336.

XX 15-JUL-1993; 93US-00093235.

XX 21-SEP-1993; 93US-00124962.

XX 21-SEP-1993; 93US-00125012.

XX (WEIN/) WEINER D B.

XX (WILL/) WILLIAMS W V.

XX (WANG/) WANG B.

XX (CONEX/) CONEX L R.

XX (MERV/) MERVIA M J.

XX (ZURA/) ZURAWSKI V R.

XX Weiner DB, Williams WV, Wang B, Coney LR, Mervia MJ, Zurawski VR;

XX WPI; 1994-263787/32.

XX Method for introducing genetic material into cells - utilizes

XX polynucleotide function enhancer and nucleic acid free of retroviral

XX particles, e.g. HIV immunisation.

XX Example 3; Page 44; 136pp; English.

XX A genetic vaccine against HIV contains a DNA construct which comprises

XX the sequence encoding gp160. The genetic material was then introduced

XX into the cells of an individual by (a) contacting the individual's cells

CC epitope targeted by HIV neutralising antibodies) and was used to  
 CC determine whether the anti-gp160 antibodies elicited in mice immunised  
 CC with the genetic vaccine were reactive with this region. (Updated on 25-  
 CC MAR-2003 to correct PN field.)

XX Sequence 22 AA;

Query Match 100.0%; Score 39; DB 2; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 0.2;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
 |||||  
 DB 15 RAFTYICK 22

RESULT 112  
 AAW07392  
 ID AAW07392 standard; peptide; 22 AA.

XX AAW07392;

XX 16-OCT-2003 (revised)

DT 24-FEB-1997 (first entry)

XX HIV-1 strain IIB gp120 V3 loop sequence.

XX HIV-1; gp120; V3 loop; common consensus PND domain; envelop; CD4;

XX binding site; stem-loop; lysine branched peptide; AIDS.

XX Human immunodeficiency virus 1.

XX JP08231423-A.

XX 10-SEP-1996.

XX 27-FEB-1995; 95JP-00038835.

XX 27-FEB-1995; 95JP-00038835.

XX (TERU/) TERUMO CORP.

XX (OKUDA/) OKUDA K.

XX WPI; 1996-461278/46.

XX Novel AIDS vaccine - comprises branched lysine peptide fragments derived

XX from HIV env protein.

XX Example 2; Page 5-6; 8pp; Japanese.

CC This is the sequence of the V3 loop of the gp120 envelop protein from HIV  
 CC -1 strain IIB. The sequence was used with a construct comprising part of  
 CC the HIV-1 gp120 V3 loop common consensus PND sequence (AAW07391) fused to  
 CC part of the HIV-1 CD4 binding site (AAW07391) and with the V3 loop  
 CC sequences from HIV-1 strains Thai B (AAW07393) or HGP-30 (AAW07394) to  
 CC generate a lysine branched peptide which is useful for the prevention and  
 CC treatment of AIDS. (Updated on 16-OCT-2003 to standardise OS field)

XX Sequence 22 AA;

Query Match 100.0%; Score 39; DB 2; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 0.2;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
 |||||  
 DB 14 RAFTYICK 21

RESULT 113  
 AAY07488  
 ID AAY07488 standard; peptide; 22 AA.

XX

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AC  AAY07488;
XX
XX  17-OCT-2003 (revised)
DT  17-AUG-1999 (first entry)
XX
XX  HIV-1 strain IIB gp120 V3 loop sequence.
DE
XX  Light chain; variable region; human; HIV-1; gp120; monoclonal antibody;
KW  epitope; V3 loop; heterohybridoma; human immunodeficiency virus-1;
KM  peripheral blood lymphocyte; Epstein-Barr virus; EBV; AIDS.
XX
XX  Human immunodeficiency virus 1.
OS  US5914109-A.
XX
XX  22-JUN-1999.
PD
XX
XX  21-NOV-1994; 94US-00345321.
PF
XX  15-JUN-1990; 90US-00538451.
PR  12-APR-1991; 91US-00684090.
PR  23-APR-1992; 92US-00872675.
XX
XX  (UYNV ) UNIV NEW YORK STATE.
PA
XX  Gorny MK, Zolla-Pazner S;
PI  WPI; 1999-370481/31.
XX
XX  Heterohybridoma producing human monoclonal antibodies to human
PT  immunodeficiency virus-1.
XX
XX  Example 5; Col 24; 42pp; English.
PS
XX
CC  This sequence represents the V3 loop from the gp120 protein of the human
CC  immunodeficiency virus-1 (HIV-1) strain IIB. The invention relates to
CC  the generation of heterohybridomas producing human monoclonal antibodies
CC  (see AAX79204-X79207) to a neutralising epitope of HIV-1 prepared by
CC  transforming peripheral blood lymphocytes with Epstein-Barr virus. The
CC  antibodies can be used to treat someone infected with HIV-1 or suffering
CC  from AIDS. (Updated on 17-OCT-2003 to standardise OS field)
CC
XX
SQ  Sequence 22 AA;

Query Match          100.0%; Score 39; DB 2; Length 22;
Best Local Similarity 100.0%; Pred. No. 0.2;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  1 RAFTYICK 8
    |||||
DB  13 RAFTYICK 20

RESULT 114
AAY5137
ID  AAY5137 standard; protein; 22 AA.
XX
XX  AAY5137;
AC
XX
XX  12-SEP-2003 (revised)
DT  20-JUN-2000 (first entry)
XX
XX  HIV-1 IIB V3 loop peptide sequence.
DE
XX  Human immunodeficiency virus type 1; HIV-1; infection; prevent; detect;
KW  glycoprotein 140; gp140; neutralising antibody; conformational epitope;
KM  V3 loop.
XX
XX  Human immunodeficiency virus 1.
OS  US6039957-A.
XX
XX  21-MAR-2000.
PD

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XX
XX  03-MAR-1997; 97US-00805889.
PF
XX
XX  10-DEC-1993; 93US-00165314.
PR
XX
XX  (USSH ) US DEPT HEALTH & HUMAN SERVICES.
PA
XX
XX  Doms RW, Moss B, Earl PL, Broder CC;
PI  WPI; 2000-270121/23.
XX
XX  Producing neutralizing antibodies useful for preventing, treating and
PT  diagnosing an HIV infection in a mammal comprises administering
PT  recombinant uncleaved gp140 proteins to a human.
XX
XX  Example 10; Col 12; 15pp; English.
PS
XX
CC  This sequence represents a human immunodeficiency virus type-1 IIB V3-
CC  loop peptide sequence. The peptide sequence is used to test the
CC  reactivity of the antibodies of the invention. The invention relates to a
CC  method for the production of neutralising antibodies against
CC  conformational epitopes of HIV-1 envelope proteins in humans. The method
CC  comprises administering to a human, a recombinant uncleaved gp140 protein
CC  retaining its oligomeric structure. The human produces neutralising
CC  antibodies against conformational epitopes of the HIV-1 gp140 protein
CC  found on the oligomeric structure of the gp140. The anti-HIV-1 gp140
CC  antibodies of the invention can be used for preventing and diagnosing an
CC  HIV infection in a mammal. Gp140 antibodies are useful for treating an
CC  HIV infection. A diagnostic method using the antibodies involves
CC  isolating a body fluid, preferably blood, and contacting it with a
CC  labelled monoclonal antibody for gp140, and detecting any bound antibody.
CC  (Updated on 12-SEP-2003 to standardise OS field)
CC
XX
SQ  Sequence 22 AA;

Query Match          100.0%; Score 39; DB 3; Length 22;
Best Local Similarity 100.0%; Pred. No. 0.2;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  1 RAFTYICK 8
    |||||
DB  15 RAFTYICK 22

RESULT 115
ABU07537
ID  ABU07537 standard; peptide; 22 AA.
XX
XX  ABU07537;
AC
XX
XX  23-OCT-2003 (revised)
DT  13-MAR-2003 (first entry)
XX
XX  Human N-acetylglucosaminyl transferase T4, GalNAc T4, substrate #9.
DE
XX  GalNAc T4; N-acetylglucosaminyl transferase T4; acceptor substrate;
KW  glycosylation; mucin 1; MUC1; vaccine; antiinflammatory; GalNAc-T1;
KM  GalNAc-T2; GalNAc-T3; HIV.
XX
XX  Human immunodeficiency virus 1.
OS
XX
XX  Key Location/Qualifiers
FH  Modified-site 1 /label= OTHER
FT  /note="Gln is acetylated"
XX
XX  US6465220-B1.
PN
XX
XX  15-OCT-2002.
PD
XX
XX  21-DEC-1998; 98US-00217306.
PF
XX
XX  21-DEC-1998; 98US-00217306.
PR

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XX (GLYC-) GLYCOSYM APS.  
 XX Haasan FH, Clausen H, Bennett EP, Eisenkraetzer D, Gaetgens J;  
 XX WPI; 2003-147066/14.  
 XX  
 XX Glycosylating MUC1 acceptor substrate, by glycosylating substrate with N-  
 PT acetylglucosaminyltransferase T1, GalNAc-T2 or GalNAc-T3, then with  
 PT human GalNAc-T4 to glycosylate specific Ser. Thr residues in substrate.  
 XX  
 XX Example 6; Col 9; 10pp; English.  
 XX  
 CC The invention relates to glycosylating a MUC1 (mucin 1) acceptor  
 CC substrate, comprising glycosylating the substrate with enzymatically  
 CC active N-acetylglucosaminyltransferase (GalNAc-T1, GalNAc-T2 or GalNAc-  
 CC T3, or with GalNAc capable of glycosylating MUC1 glycosylation sites  
 CC that can be glycosylated by GalNAc-T1, GalNAc-T2 or GalNAc-T3, and  
 CC glycosylating the substrate with enzymatically active human GalNAc-T4 to  
 CC glycosylate specific Ser, Thr positions in the MUC1 substrate. The method  
 CC is used for glycosylating an MUC1 acceptor substrate. The glycosylated  
 CC substrates are useful in preparation of vaccines and antiinflammatory  
 CC agents. GalNAc-T4 exhibits a different substrate specificity than  
 CC previously characterized GalNAc transferases. The activity of GalNAc-T4  
 CC is unique and specific to glycosylate specific serine and threonine  
 CC residues in MUC1 tandem repeat. The present sequence is an acceptor  
 CC substrate peptide used to test the substrate specificity of the human GalNAc  
 CC T4 protein, HIVHbpl20. (Updated on 23-Oct-2003 to standardise OS field)  
 CC  
 XX Sequence 22 AA;  
 SQ  
 Query Match 100.0%; Score 39; DB 6; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 0.2; Mismatches 0; Gaps 0;  
 Matches 8; Conservative 0; Indels 0; Indels 0; Gaps 0;  
 QY 1 RAFTTICK 8  
 Db 10 RAFTTICK 17  
 XX  
 RESULT 116  
 AAR04502  
 ID AAR04502 standard; protein; 23 AA.  
 XX  
 AC AAR04502;  
 XX  
 DT 09-SEP-2004 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 20-SEP-1990 (first entry)  
 XX  
 DE Cpd. eliciting, binding with neutralising antibodies to HIV variants.  
 XX  
 XX HIV; therapy; AIDS; principal neutralising domain; antibodies; diagnosis;  
 KM prophylaxis.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9003984-A.  
 XX  
 PD 19-APR-1990.  
 XX  
 PF 03-OCT-1988; 88US-00252949.  
 XX  
 PR 03-OCT-1988; 88US-00252949.  
 PR 01-JUN-1989; 89US-00359543.  
 PR 19-SEP-1989; 89US-00407663.  
 XX  
 PA (REPK ) REPLIGEN CORP.  
 XX  
 PI Rusche JR, Putney SD, Javaherian K, Farley J, Grimalia R;  
 PI Lynn DU, Petrobre J;  
 XX WPI; 1990-147824/19.

XX Principal neutralising domain of HIV variants - used for producing  
 PT peptide(s) and antibodies for diagnosis, prophylaxis and/or therapy  
 PT therapy therapy of HIV infection.  
 XX  
 XX Claim 27 (d); Page 84; 108pp; English.  
 XX  
 CC Either the N-terminal (a) or C-terminal (b), but not both, may be omitted  
 CC ; either (a) or (b) may comprise any of the following: cysteine, a  
 CC protein or other moiety capable of enhancing immunogenicity, a peptide  
 CC from an HIV principal neutralising domain, peptide capable of stimulating  
 CC T-cells, or general immune stimulant. See also AAR04427-R04506 and  
 CC AA004273-Q04279. (Updated on 25-MAR-2003 to correct PR field.) (Updated  
 CC on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to correct  
 CC PI field.)  
 CC  
 CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key  
 CC  
 XX Sequence 23 AA;  
 SQ  
 Query Match 100.0%; Score 39; DB 2; Length 23;  
 Best Local Similarity 100.0%; Pred. No. 0.21; Mismatches 0; Gaps 0;  
 Matches 8; Conservative 0; Indels 0; Indels 0; Gaps 0;  
 QY 1 RAFTTICK 8  
 Db 14 RAFTTICK 21  
 XX  
 RESULT 117  
 AAR04476  
 ID AAR04476 standard; protein; 23 AA.  
 XX  
 AC AAR04476;  
 XX  
 DT 09-SEP-2004 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 20-SEP-1990 (first entry)  
 XX  
 DE Human immunodeficiency virus hybrid peptide RP140.  
 XX  
 XX HIV isolates HIV-IIIB and HIV-RF; hybrid peptide RP140; therapy; AIDS;  
 KM principal neutralising domain; antibodies; diagnosis; prophylaxis.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9003984-A.  
 XX  
 PD 19-APR-1990.  
 XX  
 PF 03-OCT-1988; 88US-00252949.  
 XX  
 PR 03-OCT-1988; 88US-00252949.  
 PR 01-JUN-1989; 89US-00359543.  
 PR 19-SEP-1989; 89US-00407663.  
 XX  
 PA (REPK ) REPLIGEN CORP.  
 XX  
 PI Rusche JR, Putney SD, Javaherian K, Farley J, Grimalia R;  
 PI Lynn DU, Petrobre J;  
 XX WPI; 1990-147824/19.  
 XX  
 PT Principal neutralising domain of HIV variants - used for producing  
 PT peptide(s) and antibodies for diagnosis, prophylaxis and/or therapy  
 PT therapy therapy of HIV infection.  
 XX  
 PS Claim 8 (59); Page 76; 108pp; English.  
 XX  
 CC Peptide RP140 comprises segments of the Principal Neutralising Domain  
 CC (envelope protein) from isolates HIV-RF and HIV-IIIB. The last Cys  
 CC residue is added for the purpose of crosslinking to carrier proteins.  
 CC Cysteine residues may be added, so that the residues at or near both ends

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Query Match Similarity      100.0%; Score 39; DB 4; Length 23;
Best Local Similarity      100.0%; Pred. No. 0.21;
Matches      8; Conservative      0; Mismatches      0; Indels      0; Gaps      0

QY          1 RAFTVIGK 8
             |||||
Db           16 RAFTVIGK 23

RESULT 119
AAR06211
ID AAR06211 standard; peptide; 24 AA.
AC AAR06211;
XX
XX
DT 10-DEC-1990 (first entry)
DE Immunosuppressant protease inhibitor.
XX
XX Organ transplant; autoimmune disease; allergy; aplastic anaemia;
KW systemic erythematodes.
OS Synthetic.
XX
XX JP02157229-A.
PM 18-JUN-1990.
PD
XX
XX 07-DEC-1988; 8BJP-00310635.
PF
XX
XX 07-DEC-1988; 8BJP-00310635.
PR
XX
XX (NITTL ) NITTO DENKO CORP.
PA
XX
XX WPI; 1990-233739/31.
DR
XX
XX Protease inhibiting peptide immuno-suppressant - used to suppress
PT rejection reaction in organs transplantation.
PT
XX
XX Claim 1; Page 181; 6pp; Japanese.
PS
XX
XX Protease inhibitor may be use to suppress organ transplant rejection
CC without serious side effects. It may also be used in prevention and
CC therapy of allergy, aplastic anaemia and systemic erythematodes. See
CC also AAR06212
CC
XX
XX Sequence 24 AA;
SQ

Query Match      100.0%; Score 39; DB 2; Length 24;
Best Local Similarity 100.0%; Pred. No. 0.21;
Matches      8; Conservative      0; Mismatches      0; Indels      0; Gaps      0;

QY          1 RAFTVIGK 8
             |||||
Db           15 RAFTVIGK 22

RESULT 120
AAR07018
ID AAR07018 standard; peptide; 24 AA.
AC AAR07018;
XX
XX
DT 24-OCT-2003 (revised)
DT 18-JAN-1991 (first entry)
DE Residues 301-324 of HIV gp 120 protein used in isolation of sulphated
DE polysaccharide by affinity chromatography.
XX
XX HTV; AIDS; ARC; sp120; RP135.
KW
XX
XX Human immunodeficiency virus 1.
XS

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XX CA2007258-A.
PN
XX
PD 11-JUL-1990.
XX
PF 05-JAN-1990; 90CA-02007258.
XX
PR 11-JAN-1989; 89US-00295856.
XX
PR 05-JUL-1989; 89US-00375795.
XX
PA (RICH ) MERRELL DOW PHARM INC.
PI Cardin AD, Jackson RL;
XX
DR WPI; 1990-290631/39.
XX
PT Prepn. of anti-HIV sulphated polysaccharide - by affinity chromatography
XX using a resin-bound peptide corresp. to a HIV gp. 120 fragment.
XX
PS Disclosure; Page 7; 34pp; English.
XX
CC Anti-HIV sulphated polysaccharide (SPS) can prevent syncytium formation
XX in HIV infected C4 cells. SPS may be isolated by affinity chromatography
XX with the given resin bound peptide fragment RPI35. (Updated on 24-OCT-
XX 2003 to standardise OS field)
XX
SQ Sequence 24 AA;
XX
Query Match 100.0%; Score 39; DB 2; Length 24;
Best Local Similarity 100.0%; Pred. No. 0.21;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RAFTTICK 8
DB 15 RAFTTICK 22
XX
RESULT 121
AAR26565
ID AAR26565 standard; peptide; 24 AA.
XX
AC AAR26565;
XX
DT 24-OCT-2003 (revised)
DT 25-MAR-2003 (revised)
DT 28-JAN-1993 (first entry)
XX
DE Sequence of peptide DB1 determined from the V3 principal neutralising
DE domain (PND) region of HIV-1 strain HTLV-III B.
XX
KW Diagnostic; assay; detection; AIDS; human immunodeficiency virus.
XX
OS Human immunodeficiency virus 1; strain HTLV-III B.
XX
PN W09213682-A1.
XX
PD 20-AUG-1992.
XX
PF 29-JAN-1992; 92WO-EP000187.
XX
PR 30-JAN-1991; 91IT-MI000220.
XX
PA (SUPE-) INST SUPERIORE DI SANITA'.
PA (CNDR ) CONSIGLIO NAZ DELLE RICERCHE.
PI De Rossi A, Paci M, Mammanno F, Panozzo M, Dettin M, Di Bello C;
XX
DR WPI; 1992-299983/36.
XX
PT Synthetic peptide(s) which enhance infectivity of HIV-1 in cellular
PT cultures - are used for determining HIV-1 virus in blood and other
PT biological materials.

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XX Claim 1; Page 17; 31pp; English.
XX
XX The principal neutralizing domain (PND) of HIV-1 corresp. to a 24- amino
CC acid sequence arranged in a loop determined by a disulfide bridge in the
CC third hypervariable region, V3, of the protein gp 120. The central
CC portion of the V3-PND contains a sequence which is highly conserved in
CC different HIV-1 isolated strains, whereas the amino acids flanking this
CC sequence are variable. The antigenic properties of V3 region are known to
CC be virus-specific; antibodies elicited by MN-derived peptide do not
CC neutralize HTLV-III B virus and vice-versa. (Updated on 25-MAR-2003 to
CC correct PN field.) (Updated on 25-MAR-2003 to correct PR field.) (Updated
CC on 25-MAR-2003 to correct PA field.) (Updated on 24-OCT-2003 to
XX standardise OS field)
XX
SQ Sequence 24 AA;
XX
Query Match 100.0%; Score 39; DB 2; Length 24;
Best Local Similarity 100.0%; Pred. No. 0.21;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RAFTTICK 8
DB 15 RAFTTICK 22
XX
RESULT 122
AAR29233
ID AAR29233 standard; peptide; 24 AA.
XX
AC AAR29233;
XX
DT 25-MAR-2003 (revised)
DT 14-APR-1993 (first entry)
XX
DE Heteroconjugate antibody immunogen RPI35 (IIIB).
XX
KW V3 loop; gp41; envelope protein; MN; prototype; virus; variant; HIV;
KW homology; heteroconjugate; enzyme; epitope mapping; replication;
KW conjugate; immunogenic carrier; keyhole limpet hemocyanin; KLH;
KW ovalbumin; succinyl maleimideethyl cyclohexanecarboxylate; SWCC.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-difference 24 /note= "Not in the natural sequence of this isolate"
XX
PN W09220373-A1.
XX
PD 26-NOV-1992.
XX
PF 29-APR-1992; 92WO-US003616.
XX
PR 14-MAY-1991; 91US-00699773.
XX
PA (KEPK ) REPLIGEN CORP.
XX
PI Higgins PJ, Potts BJ;
XX
DR WPI; 1992-415475/50.
XX
XX Hetero-conjugate antibodies for treating HIV infections - comprise an
XX antibody specific for an effector cell surface antigen and an antibody to
XX a V3 loop of GP-120 envelope protein of HIV.
XX
PS Disclosure; Page 19; 69pp; English.
XX
XX The sequences given in AAR29226-35 represent peptides which were used as
XX immunogens for the production of antibodies against HIV. These peptides
XX may be either unconjugated or conjugated to an immunogenic carrier, eg. a
XX keyhole limpet hemocyanin (KLH) or ovalbumin, using succinyl
XX maleimideethyl cyclohexanecarboxylate (SWCC) as a conjugating agent.

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CC Viruses containing these or similar sequences may be recognised by the  
 CC heteroconjugate enzymes of the invention. The antibodies raised against  
 CC these sequences may be identified by standard epitope mapping techniques.  
 CC These antibodies are capable, even at low concentrations, of nearly  
 CC eliminating viral replication of different strains of HIV. (Updated on 25  
 CC -MAR-2003 to correct PN field.)

XX Sequence 24 AA;

Query Match 100.0%; Score 39; DB 2; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 0.21;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTVIGK 8  
 |||||  
 Db 15 RAFTVIGK 22

RESULT 123

AA26870  
 ID AAR26870 standard; peptide; 24 AA.

XX AAR26870;

XX 25-MAR-2003 (revised)

DT 20-MAY-1998 (first entry)

XX HIV gp120 V3 region binding assay peptide IIIB.

XX Human immunodeficiency virus; AIDS; anti-gp120 antibodies.

XX Synthetic.

XX EP503916-A1.

XX 16-SEP-1992.

XX 11-MAR-1992; 92EP-00302064.

XX 11-MAR-1991; 91US-00668266.

PR 06-MAR-1992; 92US-00894766.

XX (IDEC-) IDEC PHARM CORP.

XX Chang-Yu1 K;

XX WPI; 1992-309986/38.

PT Anti-idiotype antibodies and methods for their selection - useful as  
 PT vaccines for the prevention and treatment of HIV infection.

XX Example; Page 9; 30pp; Japanese.

XX The sequence is that of peptide IIIB, derived from the V3 region of HIV  
 CC gp120, it was used in binding assays for anti-gp120 antibodies. The anti-  
 CC gp120 antibodies are useful in vaccine formulations for the treatment or  
 CC prevention of HIV infection. See also AAR26867-R26873. (Updated on 25-MAR  
 CC -2003 to correct PN field.) (Updated on 25-MAR-2003 to correct PR field.)

XX Sequence 24 AA;

Query Match 100.0%; Score 39; DB 2; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 0.21;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTVIGK 8  
 |||||  
 Db 15 RAFTVIGK 22

RESULT 124

AA32406  
 ID AAR32406 standard; peptide; 24 AA.

XX AAR32406;

XX 25-MAR-2003 (revised)

DT 04-JUL-1993 (first entry)

XX Sequence of peptide B1 which comprises AAs 308-331 from the V3 region of  
 DE HIV-1 isolate IIIB.

XX HIV-1; vaccine; dendritic core; ss.

XX Synthetic.

XX W09303766-A1.

XX 04-MAR-1993.

XX 11-AUG-1992; 92WO-US006688.

XX 13-AUG-1991; 91US-00744281.

XX (REPK ) REPLIGEN CORP.

XX (VYRQ ) UNIV ROCKEFELLER.

XX Tam JP, Profy AT;

XX WPI; 1993-093730/11.

XX New multiple antigen peptide(s) as HIV vaccines - include a dendritic  
 PT core covalently bonded to peptide including the sequence IGPR.

XX Example; Fig 1; 35pp; English.

XX Nine peptides from the V3 regions of HIV-1 isolates IIIB, RF and MN were  
 CC incorporated into tetravalent multiple antigen peptide systems (MAPS)  
 CC (see AAR32406-14). Parallel groups of three peptides with chain lengths  
 CC spanning from 11-24 residues were synthesised in MAPS format for each  
 CC isolate. ELIS assays demonstrated that antisera titers in mice were  
 CC closely related to the length of the IIIB peptide used for the  
 CC immunisation - the longer the stronger the response. There was no  
 CC substantial antibody prodn. in mice against the other two series of  
 CC peptides, RF (B4-B6), and MN (B7-B9), except for a low reactivity in the  
 CC SP. Immunised with B8 (MN isolate). Specificity tests of the B cell  
 CC response demonstrated that the T cell epitope (AAR32415) also serves as a  
 CC B cell epitope. (Updated on 25-MAR-2003 to correct PN field.)

XX Sequence 24 AA;

Query Match 100.0%; Score 39; DB 2; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 0.21;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTVIGK 8  
 |||||  
 Db 15 RAFTVIGK 22

RESULT 125

AA33190  
 ID AAR33190 standard; peptide; 24 AA.

XX AAR33190;

XX 25-MAR-2003 (revised)

DT 11-JUL-1993 (first entry)

XX Sequence of HIV-1 derived V3 loop peptide.

XX AIDS; HIV; therapy; autoimmune disease; gp120; ss.

XX Synthetic.

XX W09303762-A1.



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XX 04-MAR-1993.
PD 10-AUG-1992; 92WO-AU000423.
XX 13-AUG-1991; 91AU-00007725.
XX (BIOT-) BIOTECH AUSTRALIA PTY LTD.
PA (SVIN-) ST VINCENT'S HOSPITAL SYDNEY LTD.
XX Geczy AF, Russell-Jones GJ, Bell SJD, Cooper DA;
XX WPI; 1993-093727/11.
XX Compans. contg. E.coli outer membrane proteins Trat, OmpA or OmpF -
PT Increase immune response and are used for treating auto-immune diseases,
PT AIDS, cancer etc.
XX Example; Page 13; 36pp; English.
XX Two peptides, gp41[8] and V3 loop derived from the gp120 region of HIV-1
CC were synthesised and purified. To improve the solubility of the gp41[8]
CC peptide the sequence RSS was added to the amino terminal to produce
CC peptide R-S-Sgp41[8]. The immunodominant HIV-derived peptides were used to
CC ascertain whether E.coli outer membrane protein Trat augments the in
CC vitro T-cell proliferative responses. (Updated on 25-MAR-2003 to correct
CC PN field.)
XX Sequence 24 AA;
SQ
Query Match 100.0%; Score 39; DB 2; Length 24;
Best Local Similarity 100.0%; Pred. No. 0.21; Mismatches 0; Gaps 0;
Matches 8; Conservative 0; Indels 0;
Qy 1 RAFTTICK 8
Db 14 RAFTTICK 21
RESULT 126
AAR38165
ID AAR38165 standard; peptide; 24 AA.
XX AAR38165;
AC
XX 27-AUG-2003 (revised)
DT 25-MAR-2003 (revised)
DT 12-OCT-1993 (first entry)
XX
XX V3 loop peptide N24G.
DE
XX gp120; HIV-1; cytotoxic T-lymphocyte; CTL; T-helper; AIDS; infection.
KW
XX Human immunodeficiency virus 1.
OS
XX WO9310816-A1.
PN
XX 10-JUN-1993.
PD
XX 02-DEC-1992; 92WO-US010378.
PF
XX 02-DEC-1991; 91US-00800932.
PR 16-SEP-1992; 92US-00945865.
XX
XX (TEXA) UNIV TEXAS SYSTEM.
PA
XX Setecry JK, Arlinghaus RB, Plateaucas CD, Nehete PN;
PI WPI; 1993-196739/24.
XX
XX Peptide composition for treating and preventing viral infections -
PT comprise CTL-inducing epitope and HIV infection-inhibiting sequence or T
PT helper cell-inducing sequence.

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XX Claim 19; page 95; 130pp; English.
XX
XX HIV gp120 V3 loop-derived peptides (AAR38170-87) are successful in
CC generating CTL responses, esp. peptide RISK (AAR38187); the T-helper cell
CC -inducing peptide includes the sequence C19A (AAR38164); HIV infection-
CC inhibiting peptides are given in AAR38188-206, and are esp. peptides
CC R15K, N24G, E13V, R8K, T13Q and H13N (AAR38165-69). The peptides may also
CC be derived from an influenza virus protein or a sendai virus protein
CC (AAR41014-15). It was observed that peptide N24G (amino acids 308-311),
CC with sequences derived from the V3 loop of HIV-1 IIB, inhibits HIV-1
CC infection of primary human T cells by 92% at 1 microg/ml (ca. 0.4-0.6
CC microm). (Updated on 25-MAR-2003 to correct PN field.) (Updated on 27-AUG
CC -2003 to correct OS field.)
XX
XX Sequence 24 AA;
SQ
Query Match 100.0%; Score 39; DB 2; Length 24;
Best Local Similarity 100.0%; Pred. No. 0.21; Mismatches 0; Gaps 0;
Matches 8; Conservative 0; Indels 0;
Qy 1 RAFTTICK 8
Db 15 RAFTTICK 22
RESULT 127
AAR44191
ID AAR44191 standard; peptide; 24 AA.
XX AAR44191;
AC
XX 25-MAR-2003 (revised)
DT 20-MAY-1994 (first entry)
DT
XX
XX gp120 V3 loop antigen B2 and lipophilic membrane anchoring group.
DE
XX Antigen; B2; third variable domain; V3 loop; gp120; HIV-1; vaccine;
KW strain IIB; multiple antigenic peptide system; dendritic core;
KW lipophilic membrane anchoring group; mammal; humoral; immunisation;
KW cytotoxic T cell; CT; immune response; infection; Freund's adjuvant;
KW pathogen; HIV; influenza; malaria.
XX
XX Human immunodeficiency virus 1.
OS
XX Synthetic.
XX
XX Key Location/Qualifiers
FH Peptide 1..18
FT Peptide /label: B2 antigenic peptide
FT Peptide 19..24
FT /note="lipophilic membrane anchoring group"
XX
XX WO9322343-A1.
PN
XX 11-NOV-1993.
PD
XX 03-MAY-1993; 93WO-US004179.
PF
XX 01-MAY-1992; 92US-00877613.
PR
XX (VYRO) UNIV ROCKEFELLER.
PA
XX Tam JP;
PI WPI; 1993-368723/46.
XX
XX New multiple antigen system esp. for use in HIV vaccines - contains
PT lipophilic membrane anchor imparting adjuvant activity, and peptide
PT antigens coupled to dendritic core.
XX
XX Disclosure; Fig 8; 55pp; English.
XX
XX The sequence given in AAR44190 is a peptide antigen, B2, which represents

```

CC residues 312-329 of the third variable domain (V3 loop) of gp120 of HIV-1 strain IIB. This sequence was attached to an amino acid linker (see also AAR44191) in the production of a multiple antigenic peptide system. This system comprises a dendritic core to which are covalently attached at least one peptide, eg. an antigenic peptide, and a lipophilic membrane anchoring group. This system may be injected into a mammal and elicits both humoral and cytotoxic T cell (CTL) immune responses. This system may be used to immunise against HIV infection. The lipophilic membrane anchoring group provides efficient adjuvant activity without the toxicity problems of Freund's adjuvant, while the dendritic structure allows multiple antigens to be attached. Optionally the antigens may be derived from different pathogens, providing vaccines which protect against more than one disease, eg. HIV, influenza and malaria. (Updated on 25-MAR-2003 to correct PN field.)

CC Sequence 24 AA;

Query Match 100.0%; Score 39; DB 2; Length 24;

Best Local Similarity 100.0%; Pred. No. 0.21; Mismatches 0; Indels 0; Gaps 0;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RAFVITIG 8  
11 RAFVITIG 18

RESULT 128

AAR63821  
ID AAR63821 standard; peptide; 24 AA.

AC AAR63821;

DT 16-OCT-2003 (revised)

DT 25-MAR-2003 (revised)

DT 29-JUN-1995 (first entry)

DE HIV-1 gp120-24 epitope amino acids 307-330.

KW Human immunodeficiency virus type 1; HIV-1; gp120 epitopes; vaccines;

XX HIV neutralising antibodies.

OS Human immunodeficiency virus 1.

PN WO9423746-A1.

XX 27-OCT-1994.

PF 15-APR-1994; 94WO-SB000340.

PR 16-APR-1993; 93US-00048976.

PA (SYNT-) SYNTELLO VACCINE DEV AB.

PI Vahline A, Svennerholm B, Rymo L, Jeansson S, Horal P;

DR WPI; 1994-341488/42.

XX New peptide(s) comprising HIV gp120 epitope(s) - for prodn. of vaccines

PT against HIV infections.

XX Claim 1; Page 18; 77pp; English.

CC AAR63809-R63849 are epitopes from the human immunodeficiency virus type 1

CC (HIV-1) gp120, by binding one or more of these epitopes to a carrier a

CC HIV vaccine is produced. These vaccines can elicit the production of HIV-

CC neutralising antibodies in monkeys, and therefore may be used to prevent

CC HIV infections, and to heighten the immune response in HIV infected

CC humans. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 16-OCT-

CC 2003 to standardise OS field)

XX Sequence 24 AA;

Query Match 100.0%; Score 39; DB 2; Length 24;

Best Local Similarity 100.0%; Pred. No. 0.21; Mismatches 0; Indels 0; Gaps 0;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RAFVITIG 8  
9 RAFVITIG 16

RESULT 129

AAR74608  
ID AAR74608 standard; peptide; 24 AA.

AC AAR74608;

DT 16-OCT-2003 (revised)

DT 04-JAN-1996 (first entry)

DE HIV-1 gp120 peptide #5.

KW HIV-1; HIV; AIDS; gp120; mucosal cell; epithelium; vagina; rectum;

XX antibody; mucosal administration; vaccine; infection.

OS Human immunodeficiency virus 1.

PN WO9511701-A1.

XX 04-MAY-1995.

PF 25-OCT-1994; 94WO-US012152.

PR 26-OCT-1993; 93US-00143577.

PA (SYNT-) SYNTELLO INC.

PI Czerkinsky C, Holmgren J, Horal P, Svennerholm B, Vahline A;

DR WPI; 1995-178653/23.

XX HIV-1 gp120 peptide to inhibit mucosal epithelium cell infection - useful

PT in peptide vaccine to inhibit HIV-1 infection of vaginal or rectal

XX mucosa.

PS Claim 2; Page 23; 34pp; English.

CC The peptide represented in this sequence, and those represented by

CC sequences AAR74604-7 are epitopes of HIV-1 gp120 that are effective to

CC generate antibodies that inhibit infection of mucosal cells by HIV-1.

CC These peptides are administered to the epithelium in a vaccine, or are

CC used to generate mucosal antibodies and thereby inhibit infection by HIV-

CC 1. These peptides are used for inhibiting the entry of HIV into vaginal

CC and rectal mucosal epithelium. The antibodies that can be generated from

CC them are able to block subsequent infection by HIV. (Updated on 16-OCT-

CC 2003 to standardise OS field)

XX Sequence 24 AA;

Query Match 100.0%; Score 39; DB 2; Length 24;

Best Local Similarity 100.0%; Pred. No. 0.21; Mismatches 0; Indels 0; Gaps 0;

1 RAFVITIG 8  
9 RAFVITIG 16

RESULT 130

AAM67414  
ID AAM67414 standard; peptide; 24 AA.

AC AAM67414;

DT 25-JAN-1999 (first entry)

DE HIV-1 peptide epitope BRU.  
 XX Immunogen; vaccine; HIV-1; T-cell; B-cell; epitope; core protein; gp120;  
 KW V3 loop.  
 XX  
 OS Synthetic.  
 OS Human immunodeficiency virus 1.  
 XX  
 PN US5817754-A.  
 XX  
 PD 06-OCT-1998.  
 XX  
 PF 05-JUN-1995; 95US-00464329.  
 XX  
 PR 09-JUN-1993; 93US-00073378.  
 XX  
 PR 09-JUN-1994; 94US-00257528.  
 XX  
 PA (CONN-) CONNAUGHT LAB LTD.  
 PI Chong P, Klein MH, Sia CDY,  
 XX  
 DR WPI; 1998-556461/47.  
 XX  
 PT Synthetic human immunodeficiency virus-1 peptide(s) - containing T-cell  
 PT epitope and B-cell epitope(s) are candidate vaccines against HIV-1.  
 XX  
 PS Disclosure; Fig 3; 40pp; English.  
 XX  
 CC The invention relates to a novel immunogenic composition for use in  
 CC vaccines for the treatment of HIV-1 comprising an HIV-1-derived T-cell  
 CC epitope linked to an HIV-1-derived B-cell epitope. The T-cell epitopes  
 CC are generally designed based on the p24 core protein and the B-cell  
 CC epitopes from the V3 loop of the gp120 protein from various HIV-1  
 CC strains. This sequence corresponds to an HIV-1 B-cell peptide epitope  
 CC used to immunise a guinea pig  
 XX  
 SQ Sequence 24 AA:  
 Query Match 100.0%; Score 39; DB 2; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 0.21;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RAFTTICK 8  
 DB 14 RAFTTICK 21  
 RESULT 131  
 ID AAW98904 standard; peptide; 24 AA.  
 XX  
 AC AAW98904;  
 XX  
 DT 05-MAY-1999 (first entry)  
 XX  
 DE HIV-1 vaccine synthetic peptide SEQ ID NO:99.  
 XX  
 KM HIV-1; human immunodeficiency virus; vaccine; T-cell epitope;  
 KM gag protein; B-cell epitope; gp41 protein; chimeric; infection.  
 XX  
 OS Synthetic.  
 OS Human immunodeficiency virus 1.  
 XX  
 PN US5876731-A.  
 XX  
 PD 02-MAR-1999.  
 XX  
 PF 05-JUN-1995; 95US-00462507.  
 XX  
 PR 09-JUN-1993; 93US-00073378.  
 XX  
 PR 09-JUN-1994; 94US-00257528.  
 XX  
 PA (CONN-) CONNAUGHT LAB LTD.

XX Chong P, Klein MH, Sia CDY;  
 PI WPI; 1999-189590/16.  
 DR  
 XX Synthetic chimeric HIV polypeptides - comprising gag protein T-cell  
 PT epitope linked to gp41 B-cell epitope.  
 XX  
 PS Example 1; Col 71-72; 41pp; English.  
 XX  
 CC The present invention describes a synthetic peptide comprising an amino  
 CC acid sequence containing a T-cell epitope of an HIV gag protein linked at  
 CC its C terminus to an amino acid sequence containing a B-cell epitope of  
 CC an HIV gp41 protein and containing the amino acid sequence: X1KDX2;  
 CC where X1 = E, A, G or Q, and X2 = A or T, or an amino acid sequence  
 CC capable of eliciting an HIV-specific antiserum and recognizing the  
 CC sequence X1KDX2. The synthetic peptide is useful in vaccines against  
 CC HIV infection and in diagnostic applications. AAW98902 to AAW98906, and  
 CC AAW98909 to AAW98989 represent synthetic peptides from the present  
 CC invention  
 XX  
 SQ Sequence 24 AA:  
 Query Match 100.0%; Score 39; DB 2; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 0.21;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RAFTTICK 8  
 DB 14 RAFTTICK 21  
 RESULT 132  
 ID AAY22581 standard; peptide; 24 AA.  
 XX  
 AC AAY22581;  
 XX  
 DT 17-OCT-2003 (revised)  
 DT 19-OCT-1999 (first entry)  
 XX  
 DE HIV LDL binding peptide, sequence A.  
 XX  
 KM HIV; LDL; low density lipoprotein; human; immune response; infection;  
 KM immunodeficiency; neoplastic tissue; myalgic encephalomyelitis; ME;  
 KM viral infection; fatigue syndrome; tuberculosis; hepatitis; AIDS; ARC;  
 KM acquired immunodeficiency syndrome; AIDS related complex;  
 KM HIV-infected CD4 cell; immunosuppressive peptide.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN WO9938524-A2.  
 XX  
 PD 05-AUG-1999.  
 XX  
 PF 28-JAN-1999; 99MO-IB000149.  
 XX  
 PR 29-JAN-1998; 98US-0072980P.  
 XX  
 PA (PREN/) PRENDERGAST P T.  
 XX  
 PI Prendergast PT;  
 XX  
 DR WPI; 1999-494040/41.  
 XX  
 PT Enhancing the immune response using a recombinant human low-density  
 PT lipoprotein receptor, useful for treating viral infections, especially  
 PT human immunodeficiency virus (HIV) infection.  
 XX  
 PS Claim 7; Page 19; 24pp; English.  
 XX  
 CC This sequence represents a HIV sequence that binds human low density  
 CC lipoprotein (LDL), and is designated sequence "A". The invention relates

to a method for enhancing the immune response in a patient with a condition, selected from immunodeficiency (due to a viral, bacterial, mycoplasmic, fungal or parasitic infection, or from the growth of neoplastic tissue), myalgic encephalomyelitis (ME), post inoculation or viral infection fatigue syndrome, tuberculosis, or hepatitis. The method comprises using a pharmaceutical composition, comprising a recombinant human LDL receptor or a mimic molecule to the cysteine rich domain of LDL receptor. The human recombinant LDL receptor forms pharmaceutical compositions for: the treatment of acquired immunodeficiency syndrome (AIDS) or ARC (AIDS related complex); reducing syncytium formation in HIV-infected CD4 cells; treating blood or body fluid or organs to neutralise/remove immunosuppressive peptides and/or viruses; or treating hepatitis A, B or C. The pharmaceutical compositions also treat a viral infection in a human or animal host. The human recombinant LDL receptor is also useful for manufacturing medicaments for treating all the conditions given above. The human recombinant LDL receptor is a highly specific inhibitor of HIV-1 replication in vitro. (Updated on 17-OCT-2003 to standardise OS field)

Sequence 24 AA;

Query Match 100.0%; Score 39; DB 2; Length 24;

Best Local Similarity 100.0%; Pred. No. 0.21; Mismatches 0; Indels 0; Gaps 0;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFVTTGK 8  
| | | | |  
DB 15 RAFVTTGK 22

RESULT 133

AAV22583

ID AAY22583 standard; peptide; 24 AA.

AC AAY22583;

DT 17-OCT-2003 (revised)

DT 19-OCT-1999 (first entry)

DE HIV LDL binding peptide, sequence "A" variant.

KW HIV; LDL: low density lipoprotein; human; immune response; infection; immunodeficiency; neoplastic tissue; myalgic encephalomyelitis; ME; viral infection fatigue syndrome; tuberculosis; hepatitis; AIDS; ARC; acquired immunodeficiency syndrome; AIDS related complex; HIV-infected CD4 cell; immunosuppressive peptide.

OS Human immunodeficiency virus 1.

PN W09938524-A2.

PD 05-AUG-1999.

PF 28-JAN-1999; 99WO-IB000149.

PR 29-JAN-1998; 98US-0072980P.

PA (PREN/) PRENDERGAST P T.

PI Prendergast PT;

DR WPI; 1999-494040/41.

PT Enhancing the immune response using a recombinant human low-density lipoprotein receptor, useful for treating viral infections, especially human immunodeficiency virus (HIV) infection.

PS Disclosure; Page 12; 24pp; English.

CC This sequence represents a variant of the HIV sequence that binds human low density lipoprotein (LDL), and is designated sequence "A" (see AAY22581). The sequence "A" peptide is isolated from HIV isolate IIB(BH10), and this sequence was isolated from HIV isolate IIB(BH8).

The invention relates to a method for enhancing the immune response in a patient with a condition, selected from immunodeficiency (due to a viral, bacterial, mycoplasmic, fungal or parasitic infection, or from the growth of neoplastic tissue), myalgic encephalomyelitis (ME), post inoculation or viral infection fatigue syndrome, tuberculosis, or hepatitis. The method comprises using a pharmaceutical composition, comprising a recombinant human LDL receptor or a mimic molecule to the cysteine rich domain of LDL receptor. The human recombinant LDL receptor forms pharmaceutical compositions for: the treatment of acquired immunodeficiency syndrome (AIDS) or ARC (AIDS related complex); reducing syncytium formation in HIV-infected CD4 cells; treating blood or body fluid or organs to neutralise/remove immunosuppressive peptides and/or viruses; or treating hepatitis A, B or C. The pharmaceutical compositions also treat a viral infection in a human or animal host. The human recombinant LDL receptor is also useful for manufacturing medicaments for treating all the conditions given above. The human recombinant LDL receptor is a highly specific inhibitor of HIV-1 replication in vitro. (Updated on 17-OCT-2003 to standardise OS field)

Sequence 24 AA;

Query Match 100.0%; Score 39; DB 2; Length 24;

Best Local Similarity 100.0%; Pred. No. 0.21; Mismatches 0; Indels 0; Gaps 0;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFVTTGK 8  
| | | | |  
DB 15 RAFVTTGK 22

RESULT 134

AAV39769

ID AAV39769 standard; peptide; 24 AA.

AC AAV39769;

DT 17-OCT-2003 (revised)

DT 26-NOV-1999 (first entry)

DE HIV1 chimeric peptide.

KW HIV; vaccine; immunogenic composition; T cell epitope; B cell epitope; infection; antibody; antiviral.

OS Human immunodeficiency virus 1.

PN US5951986-A.

PD 14-SEP-1999.

PF 06-JUN-1995; 95US-00467881.

PR 09-JUN-1993; 93US-00073378.

PR 09-JUN-1994; 94US-00257528.

PA (CONN-) CONNAUGHT LAB LTD.

PI Klein WH, Chong P, Sia CDY;

DR WPI; 1999-550482/46.

PT Immunogenic composition containing synthetic fusion polypeptides containing both the T and B cell epitopes of the human immunodeficiency virus, useful antigens in producing vaccines.

PS Disclosure; Col 73-74; 43pp; English.

CC This sequence represents a fragment of a HIV1 protein, and can be used in the immunogenic composition of the invention. The composition comprises a synthetic fusion polypeptide which includes a sequence encoding 1 or more T cell epitopes and a sequence encoding 1 or more B cell epitopes and a carrier. Both the T cell and B cell epitopes are derived from HIV proteins. The compositions are useful as vaccines against HIV infection.

CC The composition induces HIV-1-specific polyclonal antibodies that are  
CC opsonising and antiviral. The peptide components may be selected to  
CC induce a response against different viral isolates and in subjects who  
CC recognise different T cell epitopes. (updated on 17-OCT-2003 to  
CC standardise OS field)  
XX  
SQ Sequence 24 AA:

```
Oy      1 RAFTYICK 8          | | | | | | | |
Db      15 RAFTYICK 22       | | | | | | | |
```

```
Query Match      100.0%; Score 39; DB 2; Length 24;
Best Local Similarity 100.0%; Pred. No. 0.21;
Matches      8; Conservative 0; Mismatches 0; Gaps 0;
```

|    |    |          |    |
|----|----|----------|----|
| QY | 1  | RAFTVIGK | 8  |
|    |    |          |    |
| Db | 14 | RAFTVIGK | 21 |

RESULT 136  
ADP69603

| ID       | AA                        |
|----------|---------------------------|
| AAB68602 | standard; peptide; 24 AA. |

AC AAB68602;

|    |             |               |
|----|-------------|---------------|
| DT | 11-SEP-2003 | (revised)     |
| DT | 25-APR-2001 | (first entry) |

DE HIV gp120 V3 loop peptide #2.

KM HIV gp120 V3 loop; liposome composition; HIV infection

OS Human immunodeficiency virus 1.

PN US6180134-B1

PD 30-JAN-2001

PF 07-JUN-1995; 95US-00480332

PR 23-MAR-1993; 93US-00035443

XX  
XX  
(SECRET) CRYPTIC DIVISION TWO

PA (SEQU-) SEQUITUS PHARM INC.

PI Zalipsky S, Woodle MC, Martin FJ, Barenholz Y;

DR WPI; 2001-201897/20.

PT Liposome composition for use in treating septic shock comprises liposomes having an outer surface layer of polyethylene glycol chains, and a polypeptide or polysaccharide effector molecule.

PS Disclosure; Fig 13; 32pp; English.

The present invention relates to a liposome composition comprising liposomes having an outer surface layer of polyethylene glycol chains, each having a free distal end. A polypeptide or polysaccharide effector molecule is covalently attached to a portion of the distal ends. The effector interferes with specific binding of pathogen or cell in a bloodstream to a target cell or cell matrix, and is rapidly removed by renal clearance from the bloodstream when administered in free form. The liposome composition may be used in treating a condition mediated by binding a pathogen or cell in the bloodstream, to a target cell or cell matrix. It can be used in treating septic shock, toxic shock, colonic inflammation, leukemic cell proliferation, or HIV infection. The present sequence is a peptide of the V3 loop of HIV envelope protein gp120. This peptide may be used in the composition of the present invention. gp120 binds to the CD4 receptor during HIV infection of lymphocytes. By introducing the present peptide, the CD4 receptors are blocked, thereby inhibiting HIV infection. (Updated on 11-SEP-2003 to standardise OS field)

**SQ** Sequence 24 AA;

|                       |        |                |              |           |
|-----------------------|--------|----------------|--------------|-----------|
| Query Match           | 100.0% | Score 39       | DB 4         | Length 24 |
| Best Local Similarity | 100.0% | Pred. NO. 0.21 |              |           |
| Matches               | 8      | Conservative 0 | Mismatches 0 | Indels 0  |
|                       |        |                | Gaps 0       |           |

|    |    |          |    |
|----|----|----------|----|
| QY | 1  | RAFVTIGK | 8  |
|    |    |          |    |
| Db | 15 | RAFVTIGK | 22 |

Query Match 100.0%; Score 39; DB 3; Length 24;

```

RESULT 137
AAP82464
ID AAP82464 standard; protein; 25 AA.
XX
XX AAP82464;
AC
XX 25-MAR-2003 (revised)
DT 12-NOV-1990 (first entry)
XX
DE Peptide component of AIDS vaccine.
XX
XX AIDS vaccine; T-cells.
XX
XX Synthetic.
XX
XX EP273716-A.
XX
XX 06-JUL-1988.
XX
XX 23-DEC-1987; 87EP-00311391.
XX
XX 30-DEC-1986; 86US-00947935.
XX
XX 12-FEB-1987; 87US-00014430.
XX
XX (USDC ) US SEC OF COMMERCE.
XX
XX (USSH ) US DEPT HEALTH & HUMAN SERVICE.
XX
XX Delist C, Margalit H, Cornette JL, Ouyang CS;
XX
XX WPI, 1988-184640/27.
XX
XX Synthetic peptide(s) as vaccines for AIDS - selected from peptide regions
XX
XX which can fold as a maximally amphipathic helix recognised by T cells.
XX
XX Claim 9; Page 10; 16pp; English.
XX
XX
XX This peptide is a component of an AIDS vaccine. It can fold as a
XX
XX maximally amphipathic helix and is recognised by T-cells immune to the
XX
XX AIDS virus envelope protein. See also AAP82462-63 and AAP82465-79.
XX
XX (Updated on 25-MAR-2003 to correct PA field.)
XX
XX
XX Sequence 25 AA;
SQ
Query Match 100.0%; Score 39; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 0.22;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RAFTYICK 8
DB 9 RAFTYICK 16

```

```

RESULT 138
AAP90281
ID AAP90281 standard; protein; 25 AA.
XX
XX AAP90281;
AC
XX 09-SEP-2004 (revised)
DT 24-OCT-2003 (revised)
XX
XX 25-MAR-2003 (revised)
DT 22-JUN-1990 (first entry)
XX
XX Peptide 135 of HIV env gene.
XX
XX HIV; AIDS; env gene; HIV vaccine; ds.
XX
XX Simian-Human immunodeficiency virus.
XX
XX Unidentified.
XX
XX EP306219-A.
XX
XX 08-MAR-1989.
PD

```

```

XX
XX 25-AUG-1988; 88EP-00307889.
XX
XX 27-AUG-1987; 87US-00090080.
XX
XX (REPK ) REPLIGEN CORP.
XX
XX Rucche JR, Putney SD, Jayaherian K, Farley J, Grimalia R, Lynn D;
XX
XX Petro J, Okeefe T;
XX
XX WPI; 1989-070387/10.
XX
XX New HIV protease and peptide(s) - used in diagnosis, prophylaxis or
XX
XX therapy of AIDS, esp. for prepn. of vaccines against HIV infection.
XX
XX Claim 1; Page 27; 29pp; English.
XX
XX Protein derivative stimulates a lymphocyte proliferative response in HIV-
XX
XX infected humans, providing a means of diagnosis, protection and
XX
XX therapeutic value. (Updated on 25-MAR-2003 to correct PR field.) (Updated
XX
XX on 25-MAR-2003 to correct PA field.) (Updated on 24-OCT-2003 to
XX
XX standardise OS field)
XX
XX Revised record issued on 09-SEP-2004 : Correction to location
XX
XX Sequence 25 AA;
SQ

```

```

Query Match 100.0%; Score 39; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 0.22;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RAFTYICK 8
DB 15 RAFTYICK 22

```

```

RESULT 139
AAR04475
ID AAR04475 standard; protein; 25 AA.
XX
XX AAR04475;
AC
XX 09-SEP-2004 (revised)
DT 25-MAR-2003 (revised)
XX
XX 20-SEP-1990 (first entry)
DT
XX
XX Human immunodeficiency virus hybrid peptide RP137.
XX
XX HIV isolates HIV-IIIB and HIV-RF; hybrid peptide RP137; therapy; AIDS;
XX
XX principal neutralising domain; antibodies; diagnosis; prophylaxis.
XX
XX Synthetic.
XX
XX WO9003984-A.
XX
XX 19-APR-1990.
XX
XX 03-OCT-1988; 88US-00252949.
XX
XX 03-OCT-1988; 88US-00252949.
XX
XX 01-JUN-1989; 89US-00359543.
XX
XX 19-SEP-1989; 89US-00407663.
XX
XX (REPK ) REPLIGEN CORP.
XX
XX Rucche JR, Putney SD, Jayaherian K, Farley J, Grimalia R;
XX
XX Lynn DU, Petrobre J;
XX
XX WPI; 1990-147824/19.
XX
XX Principal neutralising domain of HIV variants - used for producing
XX
XX peptide(s) and antibodies for diagnosis, prophylaxis and/or therapy
XX
XX therapy therapy of HIV infection.
PT

```

XX PS Claim 8 (58); Page 76; 108pp; English.

CC XX Peptide RPI37 comprises segments of the Principal Neutralising Domain  
 CC (envelope protein) from isolates HIV-RF and HIV-IIIB. The last Cys  
 CC residue is added for the purpose of crosslinking to carrier proteins.  
 CC Cysteine residues may be added, so that the residues at or near both ends  
 CC form a disulfide bond, giving peptide a loop-like configuration, which  
 CC can be utilised to enhance immunogenic properties of the peptides.  
 CC Protein is capable of eliciting, and/or binding with, neutralising  
 CC antibodies. The neutralising domain is bounded by cysteine residues which  
 CC occur at positions 296 and 311. The peptides can be used as immunogens  
 CC or screening reagents to generate or identify poly- or monoclonal  
 CC antibodies. See also AAR04427-R04506 and AAR04273-Q04279. (Updated on 25-  
 CC MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PA  
 CC field.) (Updated on 25-MAR-2003 to correct PI field.)

CC CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key

CC SO Sequence 25 AA:

QY Query Match 100.0%; Score 39; DB 2; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 0.22;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 1 RAFVTIGK 8  
 15 RAFVTIGK 22

RESULT 140

AAR08276  
 ID AAR08276 standard; protein; 25 AA.

XX AC AAR08276;

XX DT 07-MAR-1991 (first entry)

XX DE HIV peptide fragment (IIB isolate).

XX KM AIDS; ARC; conjugate immunogen; Neisseria outer membrane protein;  
 KM HIV major neutralisation determinant.

XX OS Human immunodeficiency virus.

XX PN EP402088-A.

XX PD 12-DEC-1990.

XX PS 05-JUN-1990; 90EP-00306082.

XX PR 06-JUN-1989; 89US-00362176.  
 PR 06-JUN-1989; 89US-00362177.  
 PR 06-JUN-1989; 89US-00362178.  
 PR 06-JUN-1989; 89US-00362179.

XX PA (MERI) MERCK & CO INC.

XX PI Emini EA, Marburg S, Scolnick EM, Larson VM;

XX DR WPI; 1990-370100/50.

XX PT Conjugate immunogen for AIDS and ARC treatment - composed of neutralising  
 PT determinant of HIV and Neisseria outer membrane.

XX PS Claim 2; Page 22; 24pp; English.

CC XX This peptide is derived from the HIV IIB isolate and is cross-reactive  
 CC with the HIV major neutralisation determinant (MND). This MND is used  
 CC in a conjugate, covalently linked to the outer membrane protein (Omp)  
 CC from Neisseria, as an immunogen for vaccination against AIDS. A cocktail  
 CC of different MND poly-peptides can be used. See also AAR08274-75 and  
 CC AAR08277

XX SQ Sequence 25 AA:

QY Query Match 100.0%; Score 39; DB 2; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 0.22;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 1 RAFVTIGK 8  
 15 RAFVTIGK 22

RESULT 141

AAR13120  
 ID AAR13120 standard; peptide; 25 AA.

XX AC AAR13120;

XX DT 24-OCT-2003 (revised)

XX DT 01-OCT-1991 (first entry)

XX DE Binding site of BAT123 and BAT267 HIV antibodies.

XX KM Anti-idiotypic; antibody; gp120; HIV; human immunodeficiency virus;  
 KM paratope; complementarity determining region; CDR; immunisation; vaccine;  
 KM immunotoxin; T-cell; AIDS; ARC.

XX OS Simian-Human immunodeficiency virus.

XX PN WO9109625-A.

XX PD 11-JUL-1991.

XX PF 21-DEC-1989; 89US-00454161.

XX PR 21-DEC-1989; 89US-00454161.  
 PR 12-JUN-1990; 90US-00531789.

XX PA (TANOC) TANOC BIOSYSTEMS IN.

XX PI Chang TW, Fung MSC, Sun CRY, Sun BNC, Chang NT;

XX DR WPI; 1991-222664/30.

XX PT Monoclonal antibodies specific to the gp120 HIV envelope protein - for  
 PT immunisation against HIV in treatment of AIDS or ARC.

XX PS Claim 5; Page 97; 124pp; English.

CC XX The peptide corresponds to residues 294-318 of the gp120 envelope protein  
 CC of HIV-1 which is a principal neutralising determinant (PND). Abs  
 CC recognise residues 294-308 (Mab BAT267) or 304-318 (Mab 123). These Mab  
 CC are used to raise anti-idiotypic Abs (AAbs). The AAbs are useful for  
 CC passive immunisation and as components for immunotoxins which destroy T-  
 CC cells infected with HIV. They inhibit T-cell infection and syncytium  
 CC formation, are group specific and neutralise specific strains of HIV-1.  
 CC They can be used to treat AIDS or ARC. The AAbs can be used for active  
 CC immunisation or can be admin with another vaccine to increase  
 CC antigenicity. See also AAR13121. (Updated on 24-OCT-2003 to standardise  
 CC OS field)

XX SO Sequence 25 AA:

QY Query Match 100.0%; Score 39; DB 2; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 0.22;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 1 RAFVTIGK 8  
 18 RAFVTIGK 25

RESULT 142

AA15058  
ID AAR15058 standard; protein; 25 AA.  
XX  
XX  
AC AAR15058;  
XX  
PF 03-JAN-1992 (first entry)  
XX  
XX  
DE HIV-1 amplifier peptide #21.  
XX  
XX  
KW human immunodeficiency virus; vaccine; human retrovirus; AIDS;  
KW acquired immunodeficiency syndrome; envelope glycoprotein.  
XX  
OS Synthetic.  
XX  
PM MO9114449-A.  
XX  
PD 03-OCT-1991.  
XX  
PF 19-MAR-1990; 90US-00494749.  
XX  
PR 19-MAR-1990; 90US-00494749.  
XX  
PS (INSP ) INST PASTEUR.  
XX  
PA Girard M;  
XX  
PI WPI; 1991-310366/42.  
XX  
DR  
XX  
XX  
PT Enhancing immunogenicity of envelope glycoprotein - for use as vaccine  
PT or immunotherapeutic drug especially against HIV, HTLV-I and HTLV-II.  
XX  
PS Claim 13; Page 50; 71pp; English.  
XX  
CC This peptide is one example of an HIV-1 amplifier peptide for use in a  
CC composition for enhancing the immunogenicity of an envelope glycoprotein  
CC of a virus. The sequence corresponds to the major neutralisation epitope  
CC (loop V3) of HIV-1 Bruitt isolate and enhances the induction of  
CC persistent neutralising antibodies in the host. The amplifier peptide is  
CC used in addition to an envelope glycoprotein for priming the induction of  
CC neutralising antibodies. The compositions are particularly useful for  
CC vaccinating against HIV, SIV, HTLV-I and HTLV-II  
XX  
SQ Sequence 25 AA;  
Query Match 100.0%; Score 39; DB 2; Length 25;  
Best Local Similarity 100.0%; Pred. No. 0.22;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RAFTVITGK 8  
DB 15 RAFTVITGK 22

RESULT 143  
AAR31276  
ID AAR31276 standard; peptide; 25 AA.  
XX  
XX  
AC AAR31276;  
XX  
DT 12-FEB-1993 (first entry)  
XX  
DE HIV principal determinant peptide.  
XX  
XX  
KW AIDS; ARC; human immunodeficiency virus; vaccine; Neisseria;  
KW meningitidis b; outer membrane protein complex; OMPC; PND135.  
XX  
OS Synthetic.  
XX  
XX  
FH Key Location/Qualifiers  
FT Modified-site 1  
XX /note="Bonds to the OMPC of the conjugate via this site"  
XX  
PN EP467700-A.

XX  
PD 22-JAN-1992.  
XX  
XX  
PF 19-JUL-1991; 91EP-00306598.  
XX  
XX  
PR 19-JUL-1990; 90US-00555339.  
PR 19-JUL-1990; 90US-00555366.  
PR 19-JUN-1991; 91US-00715276.  
PR 19-JUN-1991; 91US-00715278.  
XX  
PA (MERI ) MERCK & CO INC.  
XX  
PI Leanza WJ, Marburg S, Tolman RL, Emimi EA;  
XX  
DR WPI; 1992-026505/04.  
XX  
PT Conjugate proteins comprising HIV peptide components - useful for  
PT preparing vaccines for e.g. AIDS or for treating infections.  
XX  
XX  
PS Claim 12; Page 56; 63pp; English.  
XX  
CC The invention relates to a co-conjugate comprising an immunogenic protein  
CC or protein complex having a first set of covalent linkages to low  
CC molecular weight moieties which have an anionic or polyanionic character  
CC at physiological pH, and a second set of covalent linkages to peptides  
CC comprising HIV principal neutralizing determinants (PND's) or  
CC immunologically equivalent peptides. Preferably at least one set of the  
CC covalent linkages is comprised of maleimide derivatives; the  
CC (poly)anionic moiety is composed of one to five residues of the anionic  
CC form of a carboxylic, sulphonic or phosphonic acid; the immunogenic  
CC protein is the outer membrane protein complex (OMPC) of Neisseria  
CC meningitidis b; and the PND peptide has a linear structure, a disulphide-  
CC bonded cyclic structure, an amide-bonded cyclic structure or a thioether-  
CC bonded cyclic structure. The present sequence (PND135) is an example of a  
CC PND peptide component used in the co-conjugate. The co-conjugate is  
CC useful for inducing anti-peptide immune response in mammals, for inducing  
CC HIV-neutralizing antibodies in mammals, for formulating vaccines to  
CC prevent HIV infection or disease, including AIDS, or for treating humans  
CC afflicted with HIV infection or disease  
XX  
SQ Sequence 25 AA;  
Query Match 100.0%; Score 39; DB 2; Length 25;  
Best Local Similarity 100.0%; Pred. No. 0.22;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RAFTVITGK 8  
DB 15 RAFTVITGK 22

RESULT 144  
AAR30031  
ID AAR30031 standard; peptide; 25 AA.  
XX  
XX  
AC AAR30031;  
XX  
DT 25-MAR-2003 (revised)  
DT 28-APR-1993 (first entry)  
XX  
DE HIV principle neutralising determinant 135.  
XX  
XX  
KW Human immunodeficiency virus; AIDS; MIEP; conjugate;  
KW major immune enhancing protein; vaccine; anti-HIV antibodies; immunogen;  
KW passive immunisation.  
XX  
OS Human immunodeficiency virus.  
XX  
XX  
PN EP519554-A1.  
XX  
PD 23-DEC-1992.  
XX  
PF 11-JUN-1992; 92EP-00201693.



XX 19-JUN-1991; 91US-00715273.  
XX (MERI ) MERCK & CO INC.  
XX Emlnt A, Liu MA, Marburg S, Tolman RL;  
XX WPI, 1992-425771/52.  
XX Conjugates of HIV-1 PND peptide(s) with the M13P of Neisseria  
XX meningitidis - useful as a vaccine for treating and preventing HIV-1  
XX infection, e.g. AIDS in humans.  
XX  
XX Claim 9; Page 59; 66pp; English.  
XX The peptide is HIV principle neutralising determinant (PND) 135 and is  
XX used as part of a conjugate comprising the major immune enhancing protein  
XX (M13P) of Neisseria meningitidis covalently linked to the HIV PND. The  
XX conjugate may be used to prepare vaccines against HIV infections, e.g.  
XX AIDS, as research tools for studying PND structure- function  
XX relationships, or as immunogens for use in the passive immunisation of  
XX humans. (Updated on 25-MAR-2003 to correct PN field.)  
XX  
SQ Sequence 25 AA;  
Query Match 100.0%; Score 39; DB 2; Length 25;  
Best Local Similarity 100.0%; Pred. No. 0.22; Mismatches 0; Gaps 0;  
Matches 8; Conservative 0; Indels 0; Gaps 0;  
QY 1 RAFVTIGK 8  
DB 15 RAFVTIGK 22  
RESULT 145  
ID AAR26712 standard; peptide; 25 AA.  
AC AAR26712;  
DT 09-FEB-1993 (first entry)  
DE HIV-PND-polysaccharide-protein conjugate vaccine.  
KW Human immunodeficiency virus; principal neutralizing determinant;  
KW outer membrane protein complex; OMP; Neisseria; AIDS; PND135.  
OS Synthetic.  
FH Key Location/Qualifiers  
FT Modified-site 1..1  
FT /note= "Joins onto polysaccharide-protein complex via  
this site"  
PN EP468714-A.  
XX 29-JAN-1992.  
XX 19-JUL-1990; 90US-00555558.  
XX 19-JUL-1990; 90US-00555558.  
XX 19-JUL-1990; 90US-00555558.  
XX 19-JUN-1991; 91US-00715275.  
XX 19-JUN-1991; 91US-00715277.  
PA (MERI ) MERCK & CO INC.  
XX Marburg S, Tolman RL, Emlnt EA;  
XX WPI, 1992-034437/05.  
XX HIV peptide-polysaccharide-protein conjugates - used in vaccines or to  
XX produce antibodies to prevent or treat HIV infection.

XX Claim 9; Page 57; 63pp; English.  
XX The invention relates to a conjugate of an HIV principal neutralizing  
XX determinant (PND), or an immunologically equivalent peptide (PBP),  
XX covalently coupled to an immunogenic protein or protein complex through  
XX an antonic polysaccharide linker. Pref. the immunogenic protein is the  
XX outer membrane protein complex (OMP) of Neisseria meningitidis b and the  
XX PND peptide has a linear structure, a disulphide-bonded cyclic structure,  
XX an amide-bonded cyclic structure or a thioether-bonded cyclic structure.  
XX The present sequence (PND135) is an example of a PND peptide component.  
XX The conjugates are used for inducing HIV-neutralising antibodies or for  
XX making vaccines to prevent contraction of HIV infection or disease. The  
XX antibodies can be used for passively protecting against infection by HIV,  
XX or for protecting against proliferation of HIV post-infection, or for  
XX treating AIDS, or in diagnostic assays  
XX  
SQ Sequence 25 AA;  
Query Match 100.0%; Score 39; DB 2; Length 25;  
Best Local Similarity 100.0%; Pred. No. 0.22; Mismatches 0; Gaps 0;  
Matches 8; Conservative 0; Indels 0; Gaps 0;  
QY 1 RAFVTIGK 8  
DB 15 RAFVTIGK 22  
RESULT 146  
ID AAR33222 standard; peptide; 25 AA.  
AC AAR33222;  
DT 25-MAR-2003 (revised)  
DT 13-JUL-1993 (first entry)  
DE HIV gp120 V3 loop immunogenic peptide RP135 (IIIB).  
KW HIV-1; human immunodeficiency virus; antibody generation; AIDS;  
KW infection; CD4 binding site; soluble CD4.  
OS Synthetic.  
FH Key Location/Qualifiers  
FT Region 25  
FT /note= "not in natural sequence of isolate"  
PN WO9304693-A1.  
XX 18-MAR-1993.  
XX 02-SEP-1992; 92WO-US007511.  
XX 09-SEP-1991; 91US-00756677.  
XX 20-JUL-1992; 92US-00916542.  
PA (REPK ) REPLIGEN CORP.  
XX Potts BJ, Whiteschaf ME, Field KG, Herlihy WC;  
XX WPI, 1993-100653/12.  
XX Synergistic compn. for treating HIV-1 infection - comprises antibody to  
XX V3 loop of gp120 and antibody to CD4 binding site of gp120 or soluble CD4  
XX polypeptide.  
XX Example; Page 12; 56pp; English.  
XX The sequence is that of peptide RP135 (IIIB) used as an immunogen for the  
XX generation of antibodies directed against the V3 loop of HIV gp120. These  
XX antibodies can be used as part of a compn. with antibodies directed  
XX against the CD4 binding site of gp120. The antibodies act synergistically

CC to neutralise HIV-1 in the treatment of HIV infection caused by different  
 CC strains. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 25-MAR-  
 CC -2003 to correct PI field.)  
 CC  
 XX

SQ Sequence 25 AA;

Query Match 100.0%; Score 39; DB 2; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 0.22;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
 |||||  
 DB 15 RAFVTIGK 22

RESULT 147

AA41336  
 ID AAR41336 standard; peptide; 25 AA.  
 XX  
 AC AAR41336;

DT 24-OCT-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 22-APR-1994 (first entry)

DE HIV gp120 V3 region peptide HIV-III B.

KW V3 region; HIV; envelope gp120; vaccine; human; humoral response;  
 KW cellular immunity; carrier protein; human serum albumin; HSA;  
 KW keyhole limpet haemocyanin; KHL; multiple antigen peptide.  
 XX

OS Human immunodeficiency virus 1.

PN WO9318791-A1.

XX 30-SEP-1993.

PF 19-MAR-1993; 93WO-JP000327.

PR 26-MAR-1992; 92JP-00098602.

PR 14-AUG-1992; 92JP-00237648.

PR 15-MAR-1993; 93JP-00054239.

PA (TSDT-) TSD KK.

PI Okuda K;

DR WPI; 1993-320455/40.

PT Virus for prevention of HIV infected diseases - comprising several  
 PT peptide(s) consisting of V3 region peptide of envelope Gp., 120, etc. and  
 PT complex including carrier protein.  
 XX  
 PS Disclosure; Page 3; 35pp; Japanese.

CC The sequences given in AAR41336-39 and AAR42664 represent peptides  
 CC derived from the V3 region of HIV envelope gp120. These peptides may be  
 CC used in a vaccine which is effective in humans and animals and activates  
 CC humoral and cellular immunity. The vaccine also contains a carrier  
 CC protein containing a cysteine group, eg. human serum albumin (HSA),  
 CC keyhole limpet haemocyanin (KHL) or multiple antigen peptide. (Updated on  
 CC 25-MAR-2003 to correct PN field.) (Updated on 24-OCT-2003 to standardise  
 CC OS field)

XX Sequence 25 AA;

Query Match 100.0%; Score 39; DB 2; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 0.22;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
 |||||  
 DB 15 RAFVTIGK 22

RESULT 148

AA41330  
 ID AAR41330 standard; peptide; 25 AA.  
 XX  
 AC AAR41330;

DT 25-MAR-2003 (revised)  
 DT 21-APR-1994 (first entry)

DE HIV gp120 epitope.

KW HIV; haemagglutinin; reactants; catalysts; cofactors; repressors;  
 KW enhancers; hormones; binders; human immunodeficiency virus.  
 XX

OS Human immunodeficiency virus.

PN WO9319170-A1.

XX 30-SEP-1993.

PF 09-MAR-1993; 93WO-US002349.

PR 16-MAR-1992; 92US-00852412.

PA (WOHL/) WOHLSTADTER J N.

PI Wohlschlaeger JN;

DR WPI; 1993-320737/40.

PT Obtaining a novel mol. - capable of a desired interaction with a  
 PT substrate of interest and a selection molecule expressed by the host.  
 XX  
 PS Claim 15; Page 147; 165pp; English.

CC The HIV gp120 epitope is used to isolate, create or evolve novel mol.  
 CC including (in)organic and biomolecules such as proteins, peptides,  
 CC nucleic acids, oligonucleotides, lipids, and polysaccharides for use as  
 CC reactants, catalysts, enzymatic cofactors, repressors, enhancers,  
 CC hormones and binders for a wide variety of substrates in industrial and  
 CC therapeutic products. This epitope was isolated from variable region 3 of  
 CC HIV gp120 (amino acids 271-295). (Updated on 25-MAR-2003 to correct PN  
 CC field.)

XX Sequence 25 AA;

Query Match 100.0%; Score 39; DB 2; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 0.22;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
 |||||  
 DB 15 RAFVTIGK 22

RESULT 149

AA36587  
 ID AAR36587 standard; peptide; 25 AA.  
 XX  
 AC AAR36587;

DT 25-MAR-2003 (revised)  
 DT 06-SEP-1993 (first entry)

DE Virus neutralising epitope of envelope glycoprotein of HIV.

KW Human immunodeficiency virus; gp120; gp160; EGP; VNE; immunity.

XX Synthetic.

PN WO9308836-A1.

```

XX PD 13-MAY-1993.
XX PF 28-OCT-1992; 92WO-EP002459.
XX PR 28-OCT-1991; 91US-00782154.
XX PR 28-OCT-1991; 91US-00782241.
XX PR 28-OCT-1991; 91US-00782252.
XX PA (INSP ) INST PASTEUR.
XX PI Girard M;
XX DR WPI; 1993-167398/20.
XX PT Enhancing immunogenicity of viral envelope glycoprotein - by co-
XX PT administration of viral envelope glycoprotein itself, and an oligopeptide
XX PT derivative.
XX PS Disclosure; Page 82; 107pp; English.
XX CC A novel method of enhancing the immunogenicity of an envelope
XX CC glycoprotein (EGP) of a virus (esp. HIV gp120 or gp160) in a host
XX CC comprises admin. to the host at least one EGP of the virus in an amt.
XX CC sufficient for priming vaccination and at least one peptide derived from
XX CC an amino acid sequence of the EGP (e.g. the sequence shown), where the
XX CC peptide comprises at least one virus-neutralisation epitope (VNE). The
XX CC complex is able to enhance the induction of neutralising antibodies to
XX CC the virus and to confer long lasting immunity, longer than 6 months. See
XX CC also AAR36567-86. (Updated on 25-MAR-2003 to correct PN field.)
XX SQ Sequence 25 AA;
XX
XX Query Match 100.0%; Score 39; DB 2; Length 25;
XX Best Local Similarity 100.0%; Pred. No. 0.22;
XX Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RAFTYIGK 8
DB 15 RAFTYIGK 22

```

RESULT 150

AAW72819

ID AAW72819 standard; peptide; 25 AA.

XX AC AAW72819;

XX DT 17-OCT-2003 (revised)

XX DT 13-JAN-1999 (first entry)

XX DE HIV-1 gp120 epitope 294 to 318.

XX KM HIV-1; gp120; epitope; monoclonal antibody; envelope; neutralise;

XX KM inhibit; infection; T-cell; inhibit syncytium formation; AIDS.

XX OS Human immunodeficiency virus 1.

XX XX

XX Key Location/Qualifiers

XX FT Peptide 1..15

XX FT /label= peptide\_a

XX FT Peptide 11..25

XX FT /label= peptide\_b

XX US5834599-A.

XX PD 10-NOV-1998.

XX PF 04-MAR-1993; 93US-00026276.

XX PR 29-MAY-1987; 87US-00057445.

XX PR 24-DEC-1987; 87US-00137861.

XX PR 25-APR-1989; 89US-00343540.

```

PR 05-JUN-1992; 92US-00895197.
XX PA (TANX-) TANOX BIOSYSTEMS INC.
XX PI Sun BN, Fung SC, Kim YW, Sun CR, Chang NT, Chang T;
XX DR WPI; 1999-008810/01.
XX PT Antibody conjugate comprising monoclonal antibody - which binds to
XX PT epitope within amino acid residue of gp120 which neutralises HIV-1
XX PT conjugated with, e.g. cytotoxic agent.
XX PS Disclosure; Col 8; 22pp; English.
XX CC The present invention describes an antibody conjugate comprising an
XX CC antibody (Ab) which binds to an epitope within amino acid residue 308-322
XX CC of gp120 and neutralises HIV-1, conjugated with a cytotoxic agent, an
XX CC anti-viral agent or an agent which facilitates passage through the blood
XX CC brain barrier. Also described is an antibody conjugate as above but where
XX CC the Ab binds to an epitope within amino acid residue 298-312 of gp12
XX CC which neutralises HIV-1. The present sequence represents an HIV-1 gp120
XX CC epitope corresponding to positions 294 to 318. The Ab are monoclonal Ab
XX CC which bind to the gp120 protein on the envelope of HIV-1. They inhibit
XX CC the infection of T-cells and also inhibit syncytium formation. The
XX CC antibodies are group specific and neutralise different strains and
XX CC isolates of HIV-1. The antibodies have a variety of uses, including the
XX CC treatment and prevention of AIDS and AIDS related complex. They are
XX CC especially used to kill infected T-cells. (Updated on 17-OCT-2003 to
XX CC standardise OS field)
XX SQ Sequence 25 AA;
XX
XX Query Match 100.0%; Score 39; DB 2; Length 25;
XX Best Local Similarity 100.0%; Pred. No. 0.22;
XX Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RAFTYIGK 8
DB 18 RAFTYIGK 25

```

RESULT 151

AAW87618

ID AAW87618 standard; peptide; 25 AA.

XX AC AAW87618;

XX DT 17-OCT-2003 (revised)

XX DT 20-MAR-2003 (revised)

XX DT 03-MAR-1999 (first entry)

XX DE Epitope of HIV-1 gp120 protein.

XX KM Epitope; gp120 protein; monoclonal antibody; HIV-1; antibody BAT123;

XX KM antibody BAT267; antibody BAT085; T cell infection inhibition;

XX KM syncytia formation; acquired immune deficiency syndrome; AIDS;

XX KM AIDS-related complex; passive immunisation; antiviral; cytotoxic;

XX KM viral load measurement; vaccine.

XX OS Human immunodeficiency virus 1.

XX XX

XX US5854400-A.

XX PD 29-DEC-1998.

XX PF 22-SEP-1992; 92US-00950571.

XX PR 29-MAY-1987; 87US-00057445.

XX PR 24-DEC-1987; 87US-00137861.

XX PR 26-SEP-1991; 91US-00767533.

XX PA (TANX-) TANOX INC.

PI Fung MSC, Sun BNC, Sun CRX, Chang NT, Chang TW;  
 XX WPI; 1999-095002/08.  
 XX  
 PT Monoclonal antibodies directed against regions of gp120 of human immune  
 PT deficiency virus-1 - are neutralising and able to inhibit infection of T  
 PT cells and formation of syncytia, used for treatment, prevention or  
 PT diagnosis of acquired immune deficiency syndrome.  
 XX  
 PS Claim 2; Col 8; 16pp; English.  
 XX  
 CC The present sequence represents an epitope of the gp120 protein of human  
 CC immune deficiency virus (HIV)-1. The sequence comprises amino acids 298  
 CC to 322 of gp120. The specification describes monoclonal antibodies which  
 CC bind to sequences derived from the present epitope. Specifically, these  
 CC antibodies are designated BART23, 267 and 085. Monoclonal antibodies  
 CC neutralise HIV-1, inhibiting both infection of T cells and formation of  
 CC syncytia, so are used to treat acquired immune deficiency syndrome (AIDS)  
 CC and AIDS-related complex, by passive immunisation, as carriers of  
 CC cytotoxic or antiviral agents, and in extracorporeal systems. They can  
 CC also be used as immunoassay reagents (for diagnosis or measurement of  
 CC viral load) and to screen for neutralising epitopes, potentially useful  
 CC in vaccine development. (Updated on 20-MAR-2003 to correct PR field.)  
 CC (Updated on 17-OCT-2003 to standardise OS field)  
 CC  
 SQ Sequence 25 AA;  
 XX  
 QY  
 Db 1 RAFVTIGK 8  
 18 RAFVTIGK 25  
 XX  
 RESULT 152  
 AAE09522  
 ID AAE09522 standard; peptide; 25 AA.  
 XX  
 AC AAE09522;  
 XX  
 DT 19-NOV-2001 (first entry)  
 XX  
 DE Human immunodeficiency virus Dd haplotype peptide.  
 XX  
 KM Mucin; cytotaxic; immunostimulant; cell mediated immune response;  
 KM carcinoma; adenocarcinoma; breast cancer; dendritic cell; vaccine;  
 KM gene therapy; CTL; cytotoxic T-lymphocyte.  
 XX  
 OS Human immunodeficiency virus.  
 XX  
 PN WO200157068-A1.  
 XX  
 PD 09-AUG-2001.  
 XX  
 PE 01-FEB-2001; 2001WO-AU000090.  
 XX  
 PR 01-FEB-2000; 2000AU-00005369.  
 PR 14-JUN-2000; 2000US-00593870.  
 XX  
 PA (AUST-) AUSTIN RES INST.  
 PA  
 PI McKenzie IFC, Pieterse GA, Apostolopoulos V;  
 XX WPI; 2001-541537/60.  
 XX  
 PT Immunostimulant peptide, used as an anti-carcinoma vaccine, comprises a  
 PT an epitope of the non-VNTR, non-leader region of a mucin.  
 XX  
 PS Disclosure; Page 19; 84pp; English.  
 XX  
 CC The patent discloses peptide or polypeptides capable of eliciting an

CC immune response, comprising an amino acid sequence corresponding to an  
 CC epitope of the non-central portion of varying numbers of an amino acid  
 CC motif (VNTR), non-leader region of a mucin. The peptides of the  
 CC invention, fusion proteins comprising the peptide and conjugate compounds  
 CC with carbohydrate polymers are used to induce a cell mediated immune  
 CC response against mucin in the prevention or treatment of carcinoma,  
 CC preferably adenocarcinoma, most preferably breast cancer. They are also  
 CC used to pulse dendritic cell for in vivo transfer and use as a vaccine.  
 CC They are also used in gene therapy. The present sequence is a human  
 CC immunodeficiency virus (HIV) haplotype kd peptide used as a negative  
 CC control for the prediction of CTL (cytotoxic T- lymphocyte) epitopes  
 CC  
 SQ Sequence 25 AA;  
 XX  
 QY  
 Db 1 RAFVTIGK 8  
 12 RAFVTIGK 19  
 XX  
 RESULT 153  
 ADQ10566  
 ID ADQ10566 standard; peptide; 9 AA.  
 XX  
 AC ADQ10566;  
 XX  
 DT 23-SEP-2004 (first entry)  
 XX  
 DE Human immunodeficiency virus T-cell epitope seqid 131.  
 XX  
 KM immunostimulant; cytotaxic; vaccine; tumour-associated antigen SSX-2;  
 KM SSX-2 antigen; epitope cluster; MHC receptor peptide binding cleft;  
 KM immunogenic composition; immune response; cancer; vaccine vector;  
 KM epitope liberation; human leukocyte antigen; HLA A2-specific CTL;  
 KM cytotoxic T lymphocyte; T-cell epitope.  
 XX  
 OS Human immunodeficiency virus.  
 XX  
 PN US2004132088-A1.  
 XX  
 PD 08-JUL-2004.  
 XX  
 PE 10-FEB-2004; 2004US-00777053.  
 XX  
 PR 07-NOV-2001; 2001US-0336968P.  
 PR 07-NOV-2002; 2002US-00292413.  
 XX  
 PA (SIMA/) SIMARD J J L.  
 PA (DIAM/) DIAMOND D C.  
 PA (QIUZ/) QIU Z.  
 PA (LEIX/) LEI X.  
 XX  
 PI Simard JTL, Diamond DC, Qiu Z, Lei X;  
 XX WPI; 2004-517003/49.  
 XX  
 PT Novel nucleic acid encoding tumor-associated antigen SSX-2, useful in  
 PT inducing an immune response and in treating cancer.  
 XX  
 PS Disclosure; SEQ ID NO 131; 260pp; English.  
 XX  
 CC The invention describes an isolated nucleic acid (I) comprising a reading  
 CC frame comprising a first sequence, where the first sequence encodes one  
 CC or more segments of tumour-associated antigen SSX-2, which comprises a  
 CC sequence of 188 amino acids (SEQ ID NO: 40), where the first sequence  
 CC does not encode the complete SSX-2 antigen, and where each segment  
 CC comprises an epitope cluster, the cluster comprising or encoding at least  
 CC two amino acid sequences having a known or predicted affinity for a same  
 CC MHC receptor peptide binding cleft. Also described are: an isolated  
 CC polypeptide comprising the amino acid sequence encoded in the reading

CC frame; and an immunogenic composition comprising (I) or the polypeptide  
 CC of (1). (I) is a nucleic acid encoding a tumour-associated antigen SSX-2  
 CC comprising a fully defined sequence of 188 amino acids (SEQ ID NO: 40).  
 CC The nucleic acid, the encoded antigen, and composition are useful in  
 CC inducing an immune response and in treating cancer. Expression cassettes  
 CC are used in vaccine vectors. This is the amino acid sequence of a T-cell  
 CC epitope MHC ligand associated with methods, therapies and compositions  
 CC described in the invention.

XX Sequence 9 AA;

Query Match 94.9%; Score 37; DB 8; Length 9;  
 Best Local Similarity 87.5%; Pred. No. 1.8e+06;  
 Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTICK 8  
 |||||:  
 Db 2 RAFTTICK 9

RESULT 154  
 AAR04427

ID AAR04427 standard; peptide; 25 AA.

AC AAR04427;

DT 09-SEP-2004 (revised)

DT 25-MAR-2003 (revised)

DT 20-SEP-1990 (first entry)

XX Human immunodeficiency virus peptide 135.

XX HIV-IIIB; peptide 135; principal neutralising domain; antibodies;

KW diagnostic; prophylaxis; therapy; AIDS.

XX Synthetic.

XX WO9003984-A.

PD 19-APR-1990.

PF 03-OCT-1988; 88US-00252949.

PR 03-OCT-1988; 88US-00252949.

PR 01-JUN-1989; 89US-00359543.

PR 19-SEP-1989; 89US-00407663.

PA (REPK ) REPLIGEN CORP.

PI Rusche JR, Putney SD, Javaherian K, Farley J, Grimalia R;

PI Lynn DU, Petrobre J;

DR WPI; 1990-147824/19.

XX Principal neutralising domain of HIV variants - used for producing  
 PT peptide(s) and antibodies for diagnosis, prophylaxis and/or therapy  
 PT therapy therapy of HIV infection.

PS Claim 8 (30); Page 75; 108pp; English.

XX Peptide 135 comprises segments of the Principal Neutralising Domain  
 CC (envelope protein) from isolate HIV-IIIB. The last Cys residue is added  
 CC for the purpose of crosslinking to carrier proteins. Cysteine residues  
 CC can be added so that that residues at or near both ends form a disulfide  
 CC bond, thus giving the peptide a loop-like configuration, which is  
 CC utilised to enhance the immunogenic properties of the peptide. The  
 CC peptide is capable of eliciting, and/or binding with, neutralising  
 CC antibodies. The neutralising domain is bounded by cysteine residues which  
 CC occur at positions 296 and 331. Peptides can be used as immunogens or  
 CC AAR04427-R04506 and AAR04427-004279. (Updated on 25-MAR-2003 to correct  
 CC PR field.) (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-  
 CC MAR-2003 to correct PI field.)

CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key  
 CC XX Sequence 25 AA;

XX Sequence 25 AA;

Query Match 94.9%; Score 37; DB 2; Length 25;  
 Best Local Similarity 87.5%; Pred. No. 0.63;  
 Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTICK 8  
 |||||:  
 Db 15 RAFTTICK 22

RESULT 155

ID AAR66430 standard; peptide; 15 AA.

AC AAR66430;

DT 25-MAR-2003 (revised)

DT 03-AUG-1995 (first entry)

DE HIV-1 IIIB peptide 18-15.

XX T cell helper site; cytotoxic T cell response; neutralising antibody;

KW human immunodeficiency virus type 1; envelope glycoprotein gp120;

KW cluster peptide; principal neutralising determinant.

XX Synthetic.

XX WO9426785-A1.

PD 24-NOV-1994.

PF 13-MAY-1994; 94WO-US005142.

PR 14-MAY-1993; 93US-00060988.

PA (USSH ) US SEC DEPT HEALTH.

PI Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shiral M;

DR WPI; 1995-006707/01.

XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.

PS Example 1; Page 33; 120pp; English.

XX Single residues from the HIV-1 RP sequence (AAR66415) replaced residues  
 CC in the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCUS 3-18 and PCUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substituted for a Val at position 11 and substituents at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substituents were made in the principal neutralising  
 CC determinant sequence (PGRAF). In peptide 18-15, the Lys residue at  
 CC position 15 in peptide 18 has been replaced by a Gln residue. (Updated on  
 CC 25-MAR-2003 to correct PN field.)

XX Sequence 15 AA;

Query Match 89.7%; Score 35; DB 2; Length 15;  
 Best Local Similarity 87.5%; Pred. No. 1;  
 Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTICK 8  
 |||||:  
 Db 8 RAFTTICK 15

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RESULT 156
AAW66424
ID AAW66424 standard; peptide; 15 AA.
XX
AC AAW66424;
XX
DT 25-MAR-2003 (revised)
DT 03-AUG-1995 (first entry)
XX
DE HIV-1 IIB peptide 18-9.
XX
KW T cell helper site; cytotoxic T cell response; neutralising antibody;
KW human immunodeficiency virus type 1; envelope glycoprotein gp120;
KW cluster peptide; principal neutralising determinant.
XX
OS Synthetic.
XX
PN WO9426785-A1.
XX
PD 24-NOV-1994.
XX
PF 13-MAY-1994; 94WO-US005142.
XX
PR 14-MAY-1993; 93US-00060988.
XX
PA (USSH ) US SEC DEPT HEALTH.
XX
PI Bezrofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;
XX
DR WPI; 1995-006707/01.
XX
PT Polypeptide inducing helper T cell, cytotoxic T cell and antibodies
PT responses - to target antigen in hosts of different MHC haplotypes, esp.
XX
XX for therapeutic or prophylactic vaccines against HIV.
XX
PS Example 1; Page 33; 120pp; English.
XX
CC Single residues from the HIV-1 RF sequence (AAW66415) replaced residues
CC in the HIV-1 IIB sequence (AAW66414) to test the effect of each residue
CC on the binding of neutralising and non-neutralising sera from animals
CC immunised with the cluster peptides PCTUS 3-18 and PCTUS 6-18 (see
CC AAW66409 and AAW66411). Analysis of the substituted peptides (AAW66416-
CC R66430) showed that binding was enhanced over peptide 18 control when a
CC tyrosine was substid. for a Val at position 11 and substns. at positions
CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of
CC sera was reduced when substns. were made in the principal neutralising
CC determinant sequence (PCTRAF). In peptide 18-9, the Ala residue at
CC position 9 in peptide 18 has been replaced by a Val residue. (Updated on
CC 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 15 AA;

Query Match 89.7%; Score 35; DB 2; Length 15;
Best Local Similarity 87.5%; Pred. No. 1;
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 RAFTVIGK 8
Db 8 RVTFTVIGK 15

RESULT 157
AAW23229
ID AAW23229 standard; peptide; 19 AA.
XX
AC AAW23229;
XX
DT 17-OCT-2003 (revised)
DT 18-SEP-1997 (first entry)
XX
DE HIV-1 clinical strain 9622 gp120 V3 loop peptide.

```

```

XX
KW Epitope; human immunodeficiency virus type 1; HIV-1; gp120; gp160;
KW monoclonal antibody; V3 loop; immunisation; mouse; splenocyte; hybridoma;
KW membrane fraction; passive immunisation; human.
XX
OS Human immunodeficiency virus 1.
XX
PN US5618922-A.
XX
PD 08-APR-1997.
XX
PF 25-JUL-1994; 94US-00279906.
XX
PR 25-JUL-1994; 94US-00279906.
XX
PA (NISP ) NISSIN SHOKUHIN KAISHA LTD.
XX
PI Yoneda Y, Ohno T, Terada M;
XX
DR WPI; 1997-225475/20.
XX
PT Monoclonal antibody specific for human immunodeficiency virus type 1 MN
PT strain - for passive immunisation against infection.
XX
PS Example 3; Col 10; 14pp; English.
XX
CC The invention relates to a novel monoclonal antibody (MAb) NM03 which
CC binds to epitopes from the human immunodeficiency virus type 1 (HIV-1).
CC The antibody was raised conventionally by immunising Balb/c mice with
CC purified live HIV-1 MN, then isolating splenocytes and fusing them to P3-
CC X63-Ag8-UI cells. Hybridomas were then screened with membrane fractions
CC from infected and non-infected H9 cells. The MAb was observed to bind to
CC a protein band of 120 kD on a Western blot of separated, denatured HIV-1
CC proteins. This binding was shown to be between residues 320-327 by
CC epitope mapping by ELISA and competitive binding. The ability of the MAb
CC to inhibit infection of cells by HIV-1 shown by infecting H9 cells with
CC live strains of HIV-1 and testing infection by a p24 assay. This peptide
CC sequence represents the V3 loop region from HIV-1 clinical strain 9622,
CC where the MAb NM03 binds. The MAb can be used for the passive
CC immunisation of humans susceptible to, or infected with HIV-1. (Updated
CC on 17-OCT-2003 to standardise OS field)
XX
SQ Sequence 19 AA;

Query Match 89.7%; Score 35; DB 2; Length 19;
Best Local Similarity 87.5%; Pred. No. 1.3;
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 RAFTVIGK 8
Db 6 RVTFTVIGK 13

RESULT 158
AAW62892
ID AAW62892 standard; peptide; 19 AA.
XX
AC AAW62892;
XX
DT 30-SEP-1998 (first entry)
XX
DE Peptide sequence of the specification.
XX
KW Monoclonal antibody; HIV-1gp120; gp160; infection; H9 cell;
KW HIV strain MN; treatment; human HIV infection.
XX
OS Synthetic.
XX
PN JP10182489-A.
XX
PD 07-JUL-1998.
XX
PF 25-DEC-1996; 96JP-00344904.

```

XX 25-DEC-1996; 96JP-0034904.  
 XX (NISP ) NISSIN SHOKUHIN KAISHA LTD.  
 XX WPI; 1998-433774/37.  
 XX Monoclonal antibody which binds to HIV-1gp120 or gp160 - used to prevent  
 PT and treat human HIV infection.  
 XX Example 3; Page 8; 12pp; Japanese.  
 XX AAM62889-900 represent peptides used to identify a peptide sequence  
 CC (AAM62874) present in HIV-1gp120 or gp160 which is bound by the  
 CC monoclonal antibody of the invention. The antibody neutralises in vitro  
 CC the infection of H9 cell by an active HIV strain MN according to the p24  
 CC analytical method. The antibody is used for treatment of human HIV  
 CC infection  
 XX Sequence 19 AA;  
 SQ  
 QY Query Match 89.7%; Score 35; DB 2; Length 19;  
 DB Best Local Similarity 87.5%; Pred. No. 1.3;  
 Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 1 RAFTYICK 8  
 6 RTFTYICK 13  
 DB  
 RESULT 159  
 ABB05775  
 ID ABB05775 standard; peptide; 20 AA.  
 AC ABB05775;  
 XX 29-AUG-2003 (revised)  
 DT 07-MAY-2002 (first entry)  
 XX HIV gp120 related peptide SEQ ID NO:1.  
 DE Polyfunctional base sequence; microgene; industrial; cell culture;  
 XX artificial matrix protein; transgenic animal; HIV.  
 KM Human immunodeficiency virus 1.  
 OS WO200196558-A1.  
 PN 20-DEC-2001.  
 PD 15-JUN-2001; 2001WO-JP005116.  
 PF 16-JUN-2000; 2000JP-00180997.  
 XX (NISC-) JAPAN SCI & TECHNOLOGY CORP.  
 PA Shiba K;  
 PI WPI; 2002-098069/13.  
 XX Polyfunctional base sequence having two or more functions in different  
 PT reading frames, useful for producing artificial matrix proteins for cell  
 PT culture.  
 XX Example 1; Page 46; 61pp; Japanese.  
 XX The present invention describes a polyfunctional base sequence (NI)  
 CC having two or more functions in different reading frames. Also described  
 CC are: (1) a method for producing NI and artificial gene expression vectors  
 CC comprising NI; (2) transgenic non-human animals comprising NI; and (3)  
 CC treatments and diagnostic reagents containing an artificial protein,  
 CC artificial tissues or high molecular weight artificial proteins. NI is  
 CC useful for creating industrially useful artificial matrix proteins for

CC cell culture. The present sequence represents a peptide which is used in  
 CC an example from the present invention. (Updated on 29-AUG-2003 to  
 CC standardise OS field)  
 XX Sequence 20 AA;  
 SQ  
 QY Query Match 89.7%; Score 35; DB 5; Length 20;  
 DB Best Local Similarity 87.5%; Pred. No. 1.4;  
 Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 1 RAFTYICK 8  
 12 RTFTYICK 19  
 DB  
 RESULT 160  
 AAO15657  
 ID AAO15657 standard; peptide; 20 AA.  
 AC AAO15657;  
 XX 08-NOV-2002 (first entry)  
 DT Strong immune response induction-related peptide 1.  
 XX Strong immune response induction-related peptide 1.  
 DE Strong immune response induction; high-order protein structure formation;  
 XX antigen presentation; HIV.  
 KM Undenitified.  
 OS WO200233074-A1.  
 PN 25-APR-2002.  
 PD 10-OCT-2001; 2001WO-JP008893.  
 PF 13-OCT-2000; 2000JP-00314288.  
 XX (NISC-) JAPAN SCI & TECHNOLOGY CORP.  
 PA Shiba K, Ohno T;  
 PI WPI; 2002-519151/55.  
 DR Artificial protein capable of inducing a strong immune response to a  
 PT peptide group for assisting antibody production in vivo to viruses and  
 PT other antigens.  
 XX Claim 6; Page 5; 77pp; Japanese.  
 XX The invention comprises an artificial protein which induces a strong  
 CC immune response to a peptide group (the protein contains all or part of  
 CC the peptide group). The artificial protein assists the formation of high-  
 CC order protein structure and/or assists the antigen presentation of  
 CC immunocompetent cells. The artificial protein of the invention is useful  
 CC for inducing a strong immune response and the preparation of effective  
 CC antibodies to specific antigens, especially HIV. The present amino acid  
 CC sequence represents a peptide that was used in the invention  
 XX Sequence 20 AA;  
 SQ  
 QY Query Match 89.7%; Score 35; DB 5; Length 20;  
 DB Best Local Similarity 87.5%; Pred. No. 1.4;  
 Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 1 RAFTYICK 8  
 12 RTFTYICK 19  
 DB  
 RESULT 161  
 AAR62151  
 ID AAR62151 standard; peptide; 8 AA.

```

XX AC AAR62151;
XX DT 27-AUG-2003 (revised)
XX DT 25-MAR-2003 (revised)
XX DT 02-MAY-1995 (first entry)
XX DE HIV-1 gp120/41 protein motif similar to UI snRNP 70K protein.
XX XX
XX Small ribonucleoprotein complex; UI snRNP, 70K protein; epitope;
XX autocantibody; immunoinfective cluster virus; nuclear protein antigen;
XX systemic rheumatic disorder; human immunodeficiency virus; HIV-1;
XX systemic lupus erythematosus; mixed connective tissue disease;
XX scleroderma; glycoprotein 120; glycoprotein 41.
XX XX
XX OS Human immunodeficiency virus 1.
XX XX
XX PN WO9420141-A1.
XX PD 15-SEP-1994.
XX PF 10-MAR-1994; 94WO-US002631.
XX PR 11-MAR-1993; 93US-00029850.
XX XX
XX (UYSC-) UNIV SOUTHERN CALIFORNIA.
XX PA Douvas A, Takehana Y, Ehresmann G;
XX PI
XX DR WPI, 1994-302689/37.
XX XX
XX PT Methods for treating immunoinfective cluster virus infections - utilise
XX antibodies or fragments characteristic of auto antibodies produced by
XX patients with rheumatic disorders.
XX PS Disclosure; Page 56; 106pp; English.
XX XX
XX CC The UI snRNP is the target of high-titre, high avidity autoantibodies
XX occurring in the systemic rheumatoid disorders of mixed connective tissue
XX disease, scleroderma and systemic lupus erythematosus. It has been found
XX that some sites in the UI snRNP 70K protein (see AAR62120-R62135) are
XX homologous to sites in HIV-1 gp120/41 (AAR62136-R62152) and that anti-RNP
XX autoantibodies can be used to neutralise HIV-1. (Updated on 25-MAR-2003
XX to correct PN field.) (Updated on 27-AUG-2003 to correct OS field.)
XX CC
XX SQ Sequence 8 AA;
XX
XX Query Match 87.2%; Score 34; DB 2; Length 8;
XX Best Local Similarity 100.0%; Pred. No. 1.8e+06;
XX Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 1 RAFTTIG 7
XX |||||
XX 2 RAFTTIG 8
XX
XX Db
XX
XX RESULT 162
XX AAR62138
XX ID AAR62138 standard; peptide; 9 AA.
XX AC
XX AAR62138;
XX XX
XX DT 27-AUG-2003 (revised)
XX DT 25-MAR-2003 (revised)
XX DT 02-MAY-1995 (first entry)
XX XX
XX DE HIV-1 gp120/41 protein motif similar to UI snRNP 70K protein.
XX XX
XX Small ribonucleoprotein complex; UI snRNP, 70K protein; epitope;
XX autocantibody; immunoinfective cluster virus; nuclear protein antigen;
XX systemic rheumatic disorder; human immunodeficiency virus; HIV-1;
XX systemic lupus erythematosus; mixed connective tissue disease;
XX scleroderma; glycoprotein 120; glycoprotein 41.
XX XX

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XX OS Human immunodeficiency virus 1.
XX XX
XX PN WO9420141-A1.
XX PD 15-SEP-1994.
XX PF 10-MAR-1994; 94WO-US002631.
XX PR 11-MAR-1993; 93US-00029850.
XX XX
XX (UYSC-) UNIV SOUTHERN CALIFORNIA.
XX PA Douvas A, Takehana Y, Ehresmann G;
XX PI
XX DR WPI, 1994-302689/37.
XX XX
XX PT Methods for treating immunoinfective cluster virus infections - utilise
XX antibodies or fragments characteristic of auto antibodies produced by
XX patients with rheumatic disorders.
XX PS Disclosure; Page 52; 106pp; English.
XX XX
XX CC The UI snRNP is the target of high-titre, high avidity autoantibodies
XX occurring in the systemic rheumatoid disorders of mixed connective tissue
XX disease, scleroderma and systemic lupus erythematosus. It has been found
XX that some sites in the UI snRNP 70K protein (see AAR62120-R62135) are
XX homologous to sites in HIV-1 gp120/41 (AAR62136-R62152) and that anti-RNP
XX autoantibodies can be used to neutralise HIV-1. (Updated on 25-MAR-2003
XX to correct PN field.) (Updated on 27-AUG-2003 to correct OS field.)
XX CC
XX SQ Sequence 9 AA;
XX
XX Query Match 87.2%; Score 34; DB 2; Length 9;
XX Best Local Similarity 100.0%; Pred. No. 1.8e+06;
XX Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 1 RAFTTIG 7
XX |||||
XX 3 RAFTTIG 9
XX
XX Db
XX
XX RESULT 163
XX ADK68768
XX ID ADK68768 standard; peptide; 9 AA.
XX AC
XX ADK68768;
XX XX
XX DT 06-MAY-2004 (first entry)
XX DE Epitope liberation-related peptide SeqID131.
XX XX
XX epitope liberation; substrate; proteasome; cytosolic; antibacterial;
XX proteozaside; fungicide; T-cell activator; vaccine; housekeeping epitope;
XX cytotoxic T lymphocyte; CTL; adoptive immunotherapy; neoplastic cell;
XX virus; bacterium; protozoan; fungus; housekeeping proteasome system.
XX XX
XX OS Human immunodeficiency virus.
XX XX
XX PN US2003228634-A1.
XX PD 11-DEC-2003.
XX PF 07-NOV-2002; 2002US-00292413.
XX PR 07-NOV-2001; 2001US-0336968P.
XX XX
XX (SIMA/) STWARD J J L.
XX (DIAM/) DIAMOND D C.
XX (QIUZ/) QIU Z.
XX (LEIX/) LEI X.
XX PI Simard JTL, Diamond DC, Qiu Z, Lei X;

```



XX WPI: 2004-167209/16.  
 DR Identifying polypeptide suitable for epitope e.g., housekeeping epitope,  
 XX liberation by contacting substrate polypeptide comprising epitope of  
 PT interest, with proteasome, and assaying for liberation of epitope.  
 XX  
 PS Disclosure; SEQ ID NO 131; 67pp; English.  
 XX  
 XX This invention relates to a novel method of identifying a polypeptide  
 CC suitable for epitope liberation, including the steps of identifying an  
 CC epitope of interest; providing substrate polypeptide sequence including  
 CC the epitope, wherein the substrate permits processing by a proteasome;  
 CC contacting the substrate with a composition including the proteasome,  
 CC under conditions that support processing of the substrate by proteasome;  
 CC and assaying for liberation of epitope. The invention may be useful for  
 CC the development of compounds with a cytostatic, antibacterial,  
 CC protozoacide or fungicide activity acting as T-cell activators. In  
 CC addition, the invention may allow development of a vaccine. The invention  
 CC is useful for identifying a polypeptide suitable for epitope liberation,  
 CC where the epitope is a housekeeping epitope. The compositions comprising  
 CC the identified housekeeping epitopes are useful in vitro in vaccine  
 CC development or in the generation or expansion of cytotoxic T lymphocyte  
 CC for activating T-cells against neoplastic cells, and cells infected with  
 CC virus, bacterium, protozoan or fungus. CTL epitopes are identified based  
 CC on the knowledge that such epitopes are, in fact, produced by the  
 CC housekeeping proteasome system. Once identified, these epitopes, embodied  
 CC as peptides, can be used to successfully immunise or induce therapeutic  
 CC CTL responses against housekeeping proteasome expressing target cells in  
 CC the host. The present sequence is that of a peptide which is related to  
 CC the method of the invention.  
 XX  
 SQ Sequence 9 AA;

Query Match 87.2%; Score 34; DB 8; Length 9;  
 Best Local Similarity 87.5%; Pred. No. 1.8e+06;  
 Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
 |||||  
 Db 2 RAFVTXGK 9

RESULT 164  
 AAR62165  
 ID AAR62165 standard; peptide; 10 AA.  
 XX  
 XX AAR62165;

XX 27-AUG-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 03-MAY-1995 (first entry)  
 XX

DE HIV-1 gp120 V3 loop neutralising domain.

XX epitope; autoantibody; immunoinfective cluster virus;  
 KW nuclear protein antigen; systemic rheumatic disorder;  
 KW human immunodeficiency virus; HIV-1; systemic lupus erythematosus;  
 KW mixed connective tissue disease; scleroderma; glycoprotein 120.  
 XX

OS Human immunodeficiency virus 1.

PN WO9420141-A1.

PD 15-SEP-1994.

PF 10-MAR-1994; 94WO-US002631.

XX 11-MAR-1993; 93US-00029850.

PA (UYSC-) UNIV SOUTHERN CALIFORNIA.  
 XX

PI Douvas A, Takehana Y, Ehreemann G;  
 XX WPI: 1994-302689/37.  
 DR  
 XX Methods for treating immunoinfective cluster virus infections - utilise  
 PT antibodies or fragments characteristic of auto antibodies produced by  
 PT patients with rheumatic disorders.  
 XX

PS Disclosure; Page 62; 106pp; English.

XX Previous immunological analyses of the V3 loop of HIV-1 (AAR62159) have  
 CC localised the main neutralising domain. The target of more than 80% of  
 CC neutralising antibodies in HIV-1 infected sera from AIDS patients has now  
 CC been found to overly the consensus binding sequence and domain A epitopes  
 CC of the V3 SDRNP 70K protein. In AIDS, antibody titres are too low to  
 CC arrest the disease; however, the homologous sequences in 70K are  
 CC immunodominant targets of autoantibodies in the systemic rheumatoid  
 CC disorder of mixed connective tissue disease. The titres of such  
 CC autoantibodies exceed 10 power 7. The anti-SDRNP autoantibodies w111  
 CC cross-react with HIV-1 epitopes and are useful for treating HIV  
 CC infection. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 27-  
 CC AUG-2003 to correct OS field.)  
 XX

SQ Sequence 10 AA;

Query Match 87.2%; Score 34; DB 2; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 1.1;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIG 7  
 |||||  
 Db 4 RAFVTIG 10

RESULT 165  
 AAM54661  
 ID AAM54661 standard; peptide; 10 AA.  
 XX  
 XX AAM54661;

XX 25-SEP-1998 (first entry)  
 DT  
 XX

DE Peptide from HIV-1 gp120 314-322.

XX Mannose; antigen; antigen-presenting cell; mannosylated peptide; T cell;  
 KW vaccine; treatment.  
 XX

XX Synthetic.

PN WO9813378-A1.

XX 02-APR-1998.

PF 25-SEP-1997; 97WO-NL000536.

PR 26-SEP-1996; 96EP-00202701.

XX (UYLE-) RIJXSUNIV LEIDEN.

PA Konig F, Drifhout JW;

PI WPI: 1998-230631/20.

DR Increasing uptake and presentation of antigen(s) - by adding mannose  
 XX residue(s) to antigen for increasing T cell response, useful in, e.g.  
 PT vaccines against viral infection(s).  
 XX

PS Disclosure; Page 29; 47pp; English.

XX The peptides AAM5459-W54809 are examples of peptides to which at least 1  
 CC (preferably 2) mannose can be attached to increase their uptake as  
 CC antigens by antigen-presenting cells. Uptake of agonist mannosylated  
 CC peptides will increase the T cell response, whereas uptake of antagonist

CC peptides blocks the T cell response. Blocking binding of immunogenic  
 CC autoantigens can be used in treatment of type I diabetes, rheumatoid  
 CC arthritis, graft rejection etc., also to induce T-cell non-  
 CC responsiveness. Vaccines containing mannosylated antigen are used to  
 CC prevent or treat infections by, e.g. bacteria, viruses, fungi, helminths  
 CC and parasites  
 XX  
 SQ Sequence 10 AA;

Query Match 87.2%; Score 34; DB 2; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 1.1;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFTVIG 7  
 |||||  
 DB 2 RAFTVIG 8

## RESULT 166

AAR62167  
 ID AAR62167 standard; peptide; 11 AA.

AC AAR62167;

DT 27-AUG-2003 (revised)

DT 25-MAR-2003 (revised)

DT 03-MAY-1995 (first entry)

DE HIV-1 gp120 V3 loop domain containing U1 snRNP 70K consensus epitope.

XX epitope; autoantibody; immunoinfective cluster virus;

KW nuclear protein antigen; systemic rheumatic disorder;

KW human immunodeficiency virus; HIV-1; systemic lupus erythematosus;

KW mixed connective tissue disease; scleroderma; glycoprotein 120;

XX UI snRNP 70K protein.

OS Human immunodeficiency virus 1.

PN MO9420141-A1.

PD 15-SEP-1994.

PF 10-MAR-1994; 94WO-US002631.

PR 11-MAR-1993; 93US-00029850.

PA (VUSC-) UNIV SOUTHERN CALIFORNIA.

PI Douvas A, Takehana Y, Ehresmann G;

DR WPI; 1994-302689/37.

PT Methods for treating immunoinfective cluster virus infections - utilise  
 PT antibodies or fragments characteristic of auto antibodies produced by  
 PT patients with rheumatic disorders.

XX Disclosure; Page 62; 106pp; English.

CC Previous immunological analyses of the V3 loop of HIV-1 (AAR62159) have  
 CC localised the main neutralising domains. The target of more than 80% of  
 CC neutralising antibodies in HIV-1 infected sera from AIDS patients has now  
 CC been found to overly the consensus binding sequence and domain A epitopes  
 CC of the U1 snRNP 70K protein. In AIDS, antibody titres are too low to  
 CC arrest the disease; however, the homologous sequences in 70K are  
 CC immunodominant targets of autoantibodies in the systemic rheumatoid  
 CC disorder of mixed connective tissue disease. The titres of such  
 CC autoantibodies exceed 10 power 7. The anti-snRNP autoantibodies will  
 CC cross-react with HIV-1 epitopes and are useful for treating HIV  
 CC infection. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 27-  
 CC AUG-2003 to correct OS field.)

XX Sequence 11 AA;

Query Match 87.2%; Score 34; DB 2; Length 11;  
 Best Local Similarity 100.0%; Pred. No. 1.3;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFTVIG 7  
 |||||  
 DB 5 RAFTVIG 11

## RESULT 167

AAW76852  
 ID AAW76852 standard; peptide; 11 AA.

AC AAW76852;

DT 25-JAN-1999 (first entry)

DE Fusion immunoglobulin heavy chain HIV gp120 B cell epitope #22.

XX B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IgH;

KW human immune deficiency virus; HIV; tolerance; treatment; therapy;

KW prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;

KW microbial infection; autoimmune disease; antibody; apoptosis;

XX antiviral T cell immunity.

OS Mus sp.

PN Homo sapiens.

PD WO9836087-A1.

PF 20-AUG-1998.

PR 13-FEB-1998; 98WO-US002766.

PR 13-FEB-1997; 97US-0040581P.

PA (AMNA-) AMERICAN NAT RED CROSS.

PI Scott D, Zambidis E;

DR WPI; 1998-506315/43.

PT New fusion immunoglobulin heavy chain including gp120 epitopes and  
 PT related complete antibodies - DNA, vectors and transfected cells, used to  
 PT induce tolerance to the epitopes for treatment of human immune deficiency  
 PT virus infection.

PS Claim 10; Page 119; 154pp; English.

CC This sequence is an epitope used in the construction of a novel fusion  
 CC immunoglobulin heavy chain (IGH) protein with a mammalian, especially  
 CC human, IGH chain fused in frame at its N-terminus to one or more human  
 CC immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or  
 CC transfected cells are used to tolerate subjects to gp120 epitopes and to  
 CC maintain this tolerance, particularly for treatment of HIV infection,  
 CC optionally together with other therapeutic/prophylactic agents such as  
 CC vaccines, chemotherapeutic agents and immune response modifiers. Such  
 CC proteins can be used against other diseases where an immune response is  
 CC deleterious, e.g. microbial infection, tumours or autoimmune disease.  
 CC Induction of tolerance suppresses production of antibodies against gp120,  
 CC so prevents or inhibits 'bystander' apoptosis of uninfected T cells that  
 CC are bound to gp120 protein, maximising induction of protective antiviral  
 CC T cell immunity

XX Sequence 11 AA;

Query Match 87.2%; Score 34; DB 2; Length 11;  
 Best Local Similarity 100.0%; Pred. No. 1.3;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFTVIG 7  
 |||||  
 DB 5 RAFTVIG 11

RESULT 168  
 AAM99432  
 ID AAM99432 standard; peptide; 12 AA.  
 XX  
 AC AAM99432;  
 XX  
 DT 07-DEC-2001 (first entry)  
 XX  
 DE Vaccine related MHC ligand peptide SEQ ID NO:535.  
 XX  
 KM Glutamic acid; glutamine; vaccine; major histocompatibility complex; MHC;  
 KM immunomodulator; antiallergic; endocrine; neuroprotectant; virucidal;  
 KM bactericidal; antiparasitic; fungicidal; cytostatic; medicine;  
 KM pharmaceutical; immune disorder; immune deficiency; autoimmune;  
 KM hypersensitivity; allergy; graft rejection; infection; hormonal disorder;  
 KM central nervous system disease; cancer; melanoma; anti-melanoma vaccine;  
 KM human immunodeficiency virus.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200170772-A2.  
 XX  
 PD 27-SEP-2001.  
 XX  
 PF 22-MAR-2001; 2001WO-FR000872.  
 XX  
 PR 23-MAR-2000; 2000FR-00003711.  
 XX  
 PA (FABR ) FABRE MEDICAMENT SA PIERRE.  
 XX  
 PI Klingner-Hamouir C, Corvaia N, Beck A, Goetsch L,  
 XX  
 DR WPI; 2001-611470/70.  
 XX  
 PT Stabilized pharmaceutical containing N-terminal glutamic acid or  
 PT glutamine, useful e.g. in anti-melanoma vaccines, is an addition salt  
 PT with strong acid.  
 XX  
 PS Claim 9; Page 122; 149pp; French.  
 XX  
 CC The present invention describes a pharmaceutical compound (I) that  
 CC contains an N-terminal glutamic acid (Glu) or glutamine (Gln) residue in  
 CC the form of an addition salt with a strong, physiologically acceptable  
 CC acid (II). Also described are: (a) a pharmaceutical composition  
 CC containing at least one (I); (b) a vaccine containing at least one (I)  
 CC where this is a major histocompatibility complex (MHC) ligand (Ia); (c) a  
 CC method for in vitro diagnosis of diseases associated with the presence of  
 CC (Ia); (d) a kit for method (c) that includes a (Ia); and (e) a process  
 CC for preparing (I). (I) has immunomodulator, endocrine, antiallergic,  
 CC neuroprotectant, virucidal, bactericidal, antiparasitic, fungicidal and  
 CC cytostatic activities. (II) are useful, in human or veterinary medicine,  
 CC in pharmaceutical compositions (for treating immune disorders, e.g.  
 CC immune deficiency, autoimmune states, hypersensitivity, allergy, graft  
 CC rejection, infection, hormonal disorders and central nervous system  
 CC diseases), also, where (I) is a MHC ligand (Ia), in vaccines for  
 CC treatment or prevention of: (i) viral, bacterial, parasitic or fungal  
 CC infections; or (ii) of cancers. A particular application is in anti-  
 CC melanoma vaccines. (I) are also useful for in vitro diagnosis of diseases  
 CC associated with interactions between MHC and (I), e.g. melanoma and human  
 CC immunodeficiency virus infection. AAM98898 to AAM99532 represent peptides  
 CC which can be used in pharmaceutical compounds from the present invention  
 XX  
 SQ Sequence 12 AA;  
 XX  
 Query Match 87.2%; Score 34; DB 4; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 1.4;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RAFTTIG 7  
 |||||  
 DB 6 RAFTTIG 12

RESULT 169  
 AAP95357  
 ID AAP95357 standard; peptide; 15 AA.  
 XX  
 AC AAP95357;  
 XX  
 DT 27-AUG-2003 (revised)  
 DT 30-MAR-1992 (first entry)  
 XX  
 DE Variable region V3, found in the envelope protein gp120 of an AIDS or ARC  
 DE causing or related virus.  
 XX  
 KM Vaccine; AIDS; ARC; HIV; diagnosis.  
 KM  
 OS HTLV-IIIB.  
 XX  
 FH Key Location/Qualifiers  
 FT Misc-difference 3..15  
 FT /note= "an example of a peptide of the invention"  
 FT Misc-difference 3..13  
 FT /note= "see above"  
 FT Misc-difference 3..12  
 FT /note= "see above"  
 XX  
 EN EP11219-A.  
 XX  
 PD 12-APR-1989.  
 XX  
 PF 07-OCT-1988; 88EP-00202248.  
 XX  
 PR 09-OCT-1987; 87NL-00002403.  
 XX  
 PA (DIER-) STICHTING CENT DIER.  
 PA (UNAM) UNIV VAN AMSTERDAM.  
 PA (UYAM-) UNIV AMSTERDAM ZIEKENHUI.  
 XX  
 PI Goudsmit J, Mejoen RH;  
 XX  
 DR WPI; 1989-108193/15.  
 XX  
 PT Oligopeptide(s) corresp. to beta-turn variable region of gp.120 - used  
 PT for diagnosis of and prodn of vaccines against AIDS and ARC.  
 XX  
 PS Disclosure; Page 3; 7pp; English.  
 XX  
 CC The peptides of the invention comprise the beta-turn AA SQ GPG or GPGR at  
 CC positions 312-314 or 312-315 in the AA numbering of HTLV-IIIB (BH10) and  
 CC flanking AA SQs having a length equal to or greater than 1 and pref.  
 CC equal to or greater than 2 AAs; variants in which the GPG or GPGR SQ has  
 CC been replaced by a different beta-turn SQ; and variants in which the free  
 CC NH2-terminal gp AA and/or the free carboxyl terminal gp. AA has been  
 CC blocked or modified otherwise. (Updated on 27-AUG-2003 to correct OS  
 CC field.)  
 XX  
 SQ Sequence 15 AA;  
 XX  
 Query Match 87.2%; Score 34; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 1.7;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RAFTTIG 7  
 |||||  
 DB 9 RAFTTIG 15  
 XX  
 RESULT 170  
 AAR33460  
 ID AAR33460 standard; peptide; 15 AA.  
 XX  
 AC AAR33460;  
 XX

DT 27-AUG-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 17-DEC-2001 (revised)  
 DT 03-JUL-1993 (first entry)  
 XX  
 DE Sequence of synthetic peptide which represents residues 315-329 of the  
 DE pg160 envelope protein of HIV-1 isolate IIB.  
 XX  
 KM Cytotoxic T lymphocyte; immunogenic peptide; V3 loop; treatment;  
 KM glycoprotein 160.  
 XX  
 OS Human immunodeficiency virus 1.  
 OS  
 PN USN7847311-N.  
 XX  
 PD 01-JAN-1993.  
 XX  
 PF 06-MAR-1992; 92US-00847311.  
 XX  
 PR 26-JAN-1988; 88US-00148692.  
 PR 18-SEP-1991; 91US-00760530.  
 PA (USSH ) US DEPT HEALTH & HUMAN SERVICE.  
 PI Berzofsky JA, Tapkeshita T, Shirai M, Pendleton CD, Kozlowski S;  
 PI WPI; 1993-093577/11.  
 DR  
 XX  
 PT Peptide(s) for stimulation of cytotoxic T cells specific for HIV-1 -  
 PT which correspond to residues 318-327 of HIV-1 gp 160 envelope  
 PT glycoprotein.  
 XX  
 PS Disclosure; Page 9; 61pp; English.  
 XX  
 CC The peptide corresp. to residues 319-329 of HIV-1 strain IIB gp. 160  
 CC envelope glycoprotein. It is activated by cleavage with a protease to  
 CC produce a peptide which is more active in eliciting a cytotoxic T  
 CC lymphocyte (CTL) response. It can be used for the treatment and/or  
 CC prophylaxis of HIV infection. (Note: Revised entry submitted to correct  
 CC the patent number format of US Government-owned NTIS applications to  
 CC information please visit the Derwent web site at  
 CC www.derwent.com/dwpi/updates/nls us.html.) (Updated on 25-MAR-2003 to  
 CC correct PF field.) (Updated on 27-AUG-2003 to correct OS field.)  
 CC  
 XX  
 SQ Sequence 15 AA;  
 QY  
 Db 1 RAFTTICK 8  
 8 RAFTTICK 15  
 Query Match 87.2%; Score 34; DB 2; Length 15;  
 Best Local Similarity 87.5%; Pred. No. 1.7;  
 Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

## RESULT 171

AAR62166 standard; peptide; 15 AA.  
 ID AAR62166 standard; peptide; 15 AA.  
 XX  
 AC AAR62166;  
 XX  
 DT 27-AUG-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 03-MAY-1995 (first entry)  
 XX  
 DE HIV-1 gp120 V3 loop dominant neutralising domain in chimpanzees.  
 XX  
 KM epitope; autoantibody; immunoinfective cluster virus;  
 KM nuclear protein antigen; systemic rheumatic disorder;  
 KM human immunodeficiency virus; HIV-1; systemic lupus erythematosus;  
 KM mixed connective tissue disease; scleroderma; glycoprotein 120.  
 XX

OS Human immunodeficiency virus 1.  
 XX  
 PN MO9420141-A1.  
 XX  
 PD 15-SEP-1994.  
 XX  
 PF 10-MAR-1994; 94MO-US002631.  
 XX  
 PR 11-MAR-1993; 93US-00029850.  
 PA (UYSC-) UNIV SOUTHERN CALIFORNIA.  
 PI Douvas A, Takehana Y, Ehresmann G;  
 PI WPI; 1994-302689/37.  
 DR  
 XX  
 PT Methods for treating immunoinfective cluster virus infections - utilise  
 PT antibodies or fragments characteristic of auto antibodies produced by  
 PT patients with rheumatic disorders.  
 XX  
 PS Disclosure; Page 62; 106pp; English.  
 XX  
 CC Previous immunological analyses of the V3 loop of HIV-1 (AAR62159) have  
 CC localised the main neutralising domains. The target of more than 80% of  
 CC neutralising antibodies in HIV-1 infected sera from AIDS patients has now  
 CC been found to overly the consensus binding sequence and domain A epitopes  
 CC of the U1 snRNP 70K protein. In AIDS, antibody titres are too low to  
 CC arrest the disease; however, the homologous sequences in 70K are  
 CC immunodominant targets of autoantibodies in the systemic rheumatoid  
 CC disorder of mixed connective tissue disease. The titres of such  
 CC autoantibodies exceed 10 power 7. The anti-snRNP autoantibodies will  
 CC cross-react with HIV-1 epitopes and are useful for treating HIV  
 CC infection. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 27-  
 CC AUG-2003 to correct OS field.)  
 CC  
 XX  
 SQ Sequence 15 AA;  
 QY  
 Db 1 RAFTTICK 7  
 9 RAFTTICK 15  
 Query Match 87.2%; Score 34; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 1.7;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

## RESULT 172

AAR66427 standard; peptide; 15 AA.  
 ID AAR66427 standard; peptide; 15 AA.  
 XX  
 AC AAR66427;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 03-AUG-1995 (first entry)  
 XX  
 DE HIV-1 IIB peptide 18-12.  
 XX  
 KM T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KM human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KM cluster peptide; principal neutralising determinant.  
 XX  
 OS Synthetic.  
 OS  
 PN MO9426785-A1.  
 XX  
 PD 24-NOV-1994.  
 XX  
 PF 13-MAY-1994; 94MO-US005142.  
 XX  
 PR 14-MAY-1993; 93US-00060988.  
 PA (USSH ) US SEC DEPT HEALTH.  
 XX

PI Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
 XX WPI, 1995-006707/01.  
 XX  
 PT Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 XX  
 PS Example 1, Page 33, 120pp; English.  
 XX  
 CC Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC in the HIV-1 IIB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCUS 3-18 and PCUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substid. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRAF). In peptide 18-12, the Thr residue at  
 CC position 12 in peptide 18 has been replaced by an Ala residue. (Updated  
 CC on 25-MAR-2003 to correct PN field.)  
 CC  
 XX  
 SQ Sequence 15 AA;  
 XX  
 Query Match 87.2%; Score 34; DB 2; Length 15;  
 Best Local Similarity 87.5%; Pred. No. 1.7;  
 Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Qy 1 RAFTYICK 8  
 |||||  
 Db 8 RAFTYICK 15  
 XX  
 RESULT 173  
 AAR66428  
 ID AAR66428 standard; peptide: 15 AA.  
 XX  
 AC AAR66428;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 03-AUG-1995 (first entry)  
 XX  
 DE HIV-1 IIB peptide 18-13.  
 XX  
 KW T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KM cluster peptide; principal neutralising determinant.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9426785-A1.  
 XX  
 PD 24-NOV-1994.  
 XX  
 PF 13-MAY-1994; 94WO-US005142.  
 XX  
 PR 14-MAY-1993; 93US-00060988.  
 XX  
 PA (USSH ) US SEC DEPT HEALTH.  
 XX  
 PI Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
 XX  
 DR WPI, 1995-006707/01.  
 XX  
 PT Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 XX  
 PS Example 1, Page 33, 120pp; English.  
 XX  
 CC Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC in the HIV-1 IIB sequence (AAR66414) to test the effect of each residue

CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCUS 3-18 and PCUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substid. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRAF). In peptide 18-13, the Ile residue at  
 CC position 13 in peptide 18 has been replaced by a Thr residue. (Updated on  
 CC 25-MAR-2003 to correct PN field.)  
 CC  
 XX  
 SQ Sequence 15 AA;  
 XX  
 Query Match 87.2%; Score 34; DB 2; Length 15;  
 Best Local Similarity 87.5%; Pred. No. 1.7;  
 Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Qy 1 RAFTYICK 8  
 |||||  
 Db 8 RAFTYICK 15  
 XX  
 RESULT 174  
 AAR66423  
 ID AAR66423 standard; peptide: 15 AA.  
 XX  
 AC AAR66423;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 03-AUG-1995 (first entry)  
 XX  
 DE HIV-1 IIB peptide 18-8.  
 XX  
 KW T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KM cluster peptide; principal neutralising determinant.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9426785-A1.  
 XX  
 PD 24-NOV-1994.  
 XX  
 PF 13-MAY-1994; 94WO-US005142.  
 XX  
 PR 14-MAY-1993; 93US-00060988.  
 XX  
 PA (USSH ) US SEC DEPT HEALTH.  
 XX  
 PI Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;  
 XX  
 DR WPI, 1995-006707/01.  
 XX  
 PT Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 XX  
 PS Example 1, Page 33, 120pp; English.  
 XX  
 CC Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC in the HIV-1 IIB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCUS 3-18 and PCUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substid. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRAF). In peptide 18-8, the Arg residue at  
 CC position 8 in peptide 18 has been replaced by an Ala residue. (Updated on  
 CC 25-MAR-2003 to correct PN field.)  
 CC  
 XX  
 SQ Sequence 15 AA;

Query Match 87.2%; Score 34; DB 2; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 1.7;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 AFTVIGK 8  
 |||||  
 Db 9 AFTVIGK 15

## RESULT 175

AAR66426  
 ID AAR66426 standard; peptide; 15 AA.

XX AAR66426;

XX 25-MAR-2003 (revised)  
 DT 03-AUG-1995 (first entry)

XX HIV-1 IIIB peptide 18-11.

XX T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KW human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KM cluster peptide; principal neutralising determinant.

XX Synthetic.

XX MO9426785-A1.

XX 24-NOV-1994.

XX 13-MAY-1994; 94WO-US005142.

XX 14-MAY-1993; 93US-00060988.

XX (USSH ) US SEC DEPT HEALTH.

XX Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M;

XX WPI; 1995-006707/01.

XX Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.

XX Example 1; Page 33; 120pp; English.

XX Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC in the HIV-1 IIIB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCUS 3-18 and PCUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substid. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRAF). In peptide 18-11, the Val residue at  
 CC position 11 in peptide 18 has been replaced by a Tyr residue. (Updated on  
 CC 25-MAR-2003 to correct PN field.)

XX Sequence 15 AA;

Query Match 87.2%; Score 34; DB 2; Length 15;  
 Best Local Similarity 87.5%; Pred. No. 1.7;  
 Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
 |||||  
 Db 8 RAFVTIGK 15

RESULT 176  
 AAR33236

ID AAR33236 standard; peptide; 16 AA.

XX AAR33236;

XX 25-MAR-2003 (revised)

DT 13-JUL-1993 (first entry)

XX HIV-IIIB gp120 V3 loop epitope peptide RP135.

XX HIV-1; human immunodeficiency virus; competition assay; AIDS; infection;  
 KM CD4 binding site; soluble CD4.

XX Synthetic.

XX MO9304693-A1.

XX 18-MAR-1993.

XX 02-SEP-1992; 92WO-US007511.

XX 09-SEP-1991; 91US-00756677.

XX 20-JUL-1992; 92US-00916542.

XX (REPK ) REPLIGEN CORP.

XX Potts BJ, Whiteschaf ME, Field KG, Herlihy WC;

XX WPI; 1993-100653/12.

XX Synergistic compsn. for treating HIV-1 infection - comprises antibody to  
 PT V3 loop of gp120 and antibody to CD4 binding site of gp120 or soluble CD4  
 PT polypeptide.

XX Example; Page 20; 56pp; English.

XX The sequence is that of the HIV-IIIB V3 loop epitope peptide RP135 which  
 CC was used in a competition assay to determine whether a given anti-V3 loop  
 CC antibody will have strong neutralisation activity by itself, and if it  
 CC has potential to act synergistically with a second agent. The assay can  
 CC be used to test for potential neutralisation activity of any anti-V3 loop  
 CC antibody towards any isolate by using a peptide derived from the V3 loop  
 CC from the HIV isolate of interest as the competitor (Updated on 25-MAR-  
 CC 2003 to correct PN field.) (Updated on 25-MAR-2003 to correct PI field.)

XX Sequence 16 AA;

Query Match 87.2%; Score 34; DB 2; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 1.9;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIG 7  
 |||||  
 Db 10 RAFVTIG 16

## RESULT 177

AAP95348  
 ID AAP95348 standard; peptide; 17 AA.

XX AAP95348;

XX 27-AUG-2003 (revised)

DT 30-MAR-1992 (first entry)

XX Variable region V3 sequence found in the envelope protein gp120 of an  
 DE AIDS or ARC causing or related virus.

XX Vaccine; AIDS; ARC; HIV; diagnosis.

XX HTLV-IIIB.

XX EP311219-A.

```

PD 12-APR-1989.
XX
XX 07-OCT-1988; 88EP-00202248.
XX
XX 09-OCT-1987; 87NL-00002403.
XX
XX (DIER-) STICHTING CENT DIER.
XX (UNAM) UNIV VAN AMSTERDAM.
XX (UYAM-) UNIV AMSTERDAM ZIEKENHUI.
XX
XX Goudamit J, Mejoen RH;
XX
XX WPI; 1989-108193/15.
XX
XX Oligopeptide(s) corresp. to beta-turn variable region of gp.120 - used
XX PT for diagnosis of and prodn of vaccines against AIDS and ARC.
XX
XX Disclosure; Page 3; 7pp; English.
XX
XX The peptides of the invention comprise the beta-turn AA SQ GPG or GPGR at
XX positions 312-314 or 312-315 in the AA numbering of HTLV-IIIB (BH10) and
XX flanking AA SQs having a length equal to or greater than 1 and pref.
XX equal to or greater than 2 AAs; variants in which the GPG or GPGR SQ has
XX been replaced by a different beta-turn SQ; and variants in which the free
XX NH2-terminal gp AA and/or the free carboxyl terminal gp. AA has been
XX blocked or modified otherwise. (Updated on 27-AUG-2003 to correct OS
XX field.)
XX
XX Sequence 17 AA;
XX
XX Query Match 87.2%; Score 34; DB 1; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 2;
XX Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 RAFTTIG 7
XX |||||
XX 11 RAFTTIG 17
XX
XX RESULT 178
XX AAP95349
XX ID AAP95349 standard; peptide; 17 AA.
XX
XX AAP95349;
XX
XX 27-AUG-2003 (revised)
XX DT 30-MAR-1992 (first entry)
XX
XX Variable region V3 found in the envelope protein gp120 of an AIDS or ARC
XX causing or related virus.
XX
XX Vaccine; AIDS; ARC; HIV; diagnosis.
XX
XX HTLV-IIIB.
XX
XX EP311219-A.
XX
XX 12-APR-1989.
XX
XX 07-OCT-1988; 88EP-00202248.
XX
XX 09-OCT-1987; 87NL-00002403.
XX
XX (DIER-) STICHTING CENT DIER.
XX (UNAM) UNIV VAN AMSTERDAM.
XX (UYAM-) UNIV AMSTERDAM ZIEKENHUI.
XX
XX Goudamit J, Mejoen RH;
XX
XX WPI; 1989-108193/15.
XX
XX Oligopeptide(s) corresp. to beta-turn variable region of gp.120 - used
XX PT for diagnosis of and prodn of vaccines against AIDS and ARC.

```

```

XX
XX Disclosure; Page 3; 7pp; English.
XX
XX The peptides of the invention comprise the beta-turn AA SQ GPG or GPGR at
XX positions 312-314 or 312-315 in the AA numbering of HTLV-IIIB (BH10) and
XX flanking AA SQs having a length equal to or greater than 1 and pref.
XX equal to or greater than 2 AAs; variants in which the GPG or GPGR SQ has
XX been replaced by a different beta-turn SQ; and variants in which the free
XX NH2-terminal gp AA and/or the free carboxyl terminal gp. AA has been
XX blocked or modified otherwise. (Updated on 27-AUG-2003 to correct OS
XX field.)
XX
XX Sequence 17 AA;
XX
XX Query Match 87.2%; Score 34; DB 1; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 2;
XX Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 RAFTTIG 7
XX |||||
XX 11 RAFTTIG 17
XX
XX RESULT 179
XX AAP95356
XX ID AAP95356 standard; peptide; 17 AA.
XX
XX AAP95356;
XX
XX 27-AUG-2003 (revised)
XX DT 30-MAR-1992 (first entry)
XX
XX Variable region V3, found in the envelope protein gp120 of an AIDS or ARC
XX causing or related virus.
XX
XX Vaccine; AIDS; ARC; HIV; diagnosis.
XX
XX HTLV-IIIB.
XX
XX EP311219-A.
XX
XX 12-APR-1989.
XX
XX 07-OCT-1988; 88EP-00202248.
XX
XX 09-OCT-1987; 87NL-00002403.
XX
XX (DIER-) STICHTING CENT DIER.
XX (UNAM) UNIV VAN AMSTERDAM.
XX (UYAM-) UNIV AMSTERDAM ZIEKENHUI.
XX
XX Goudamit J, Mejoen RH;
XX
XX WPI; 1989-108193/15.
XX
XX Oligopeptide(s) corresp. to beta-turn variable region of gp.120 - used
XX PT for diagnosis of and prodn of vaccines against AIDS and ARC.
XX
XX Disclosure; Page 3; 7pp; English.
XX
XX The peptides of the invention comprise the beta-turn AA SQ GPG or GPGR at
XX positions 312-314 or 312-315 in the AA numbering of HTLV-IIIB (BH10) and
XX flanking AA SQs having a length equal to or greater than 1 and pref.
XX equal to or greater than 2 AAs; variants in which the GPG or GPGR SQ has
XX been replaced by a different beta-turn SQ; and variants in which the free
XX NH2-terminal gp AA and/or the free carboxyl terminal gp. AA has been
XX blocked or modified otherwise. (Updated on 27-AUG-2003 to correct OS
XX field.)
XX
XX Sequence 17 AA;
XX
XX Query Match 87.2%; Score 34; DB 1; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 2;

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Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RAFTVIG 7
   |||||
Db 11 RAFTVIG 17

RESULT 180
AAR29241
ID AAR29241 standard; peptide; 17 AA.
XX
XX AAR29241;
AC
XX 24-OCT-2003 (revised)
DT 25-MAR-2003 (revised)
DT 14-APR-1993 (first entry)
XX
XX V3 loop region epitope from IIB isolate.
DE
XX V3 loop; gp120; envelope protein; MN; prototype; virus; variant;
KW homology; heteroconjugate; enzyme; HIV.
XX
XX Human immunodeficiency virus; IIB variant.
OS
XX WO9220373-A1.
XX
XX 26-NOV-1992.
XX
XX 29-APR-1992; 92WO-US003616.
XX
XX 14-MAY-1991; 91US-00699773.
XX
XX (REPK ) REPLIGEN CORP.
XX
XX Higgins PJ, Potts BJ;
XX
XX WPI; 1992-415475/50.
XX
XX Hetero-conjugate antibodies for treating HIV infections - comprise an
PT antibody specific for an effector cell surface antigen and an antibody to
PT a V3 loop of GP-120 envelope protein of HIV.
XX
XX
XX Disclosure; Page 32; 69pp; English.
XX
XX The sequences given in AAR29237-43 represent a portion of the V3 loop
CC region of the gp120 envelope protein of various HIV isolates. These
CC sequences can be used to define the specific isolate. All these viral
CC variants exhibit complete homology at residues 7-11 of the given sequence
CC and at least 36% homology with the remaining 12 amino acids of the
CC sequence. Viruses containing these sequences are recognised by the
CC heteroconjugate enzyme of the invention. (Updated on 25-MAR-2003 to
CC correct PN field.) (Updated on 24-OCT-2003 to standardise OS field)
XX
XX
SQ Sequence 17 AA;

Query Match 87.2%; Score 34; DB 2; Length 17;
Best Local Similarity 100.0%; Pred. No. 2;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RAFTVIG 7
   |||||
Db 11 RAFTVIG 17

RESULT 181
AAR32407
ID AAR32407 standard; peptide; 17 AA.
XX
XX AAR32407;
AC
XX 25-MAR-2003 (revised)
DT 04-JUL-1993 (first entry)
XX

```

```

DE Sequence of peptide B2 which comprises AAs 312-281 from the V3 region of
DE HIV-1 isolate IIB.
DE
XX HIV-1; vaccine; dendritic core; ss.
XX
XX Synthetic.
XX
XX WO9303766-A1.
XX
XX 04-MAR-1993.
XX
XX 11-AUG-1992; 92WO-US006688.
XX
XX 13-AUG-1991; 91US-00744281.
XX
XX (REPK ) REPLIGEN CORP.
XX (VYRQ ) UNIV ROCKEFELLER.
XX
XX Tam JP, Profy AT;
XX
XX WPI; 1993-093730/11.
XX
XX New multiple antigen peptide(s) as HIV vaccines - include a dendritic
XX core covalently bonded to peptide including the sequence IGPGR.
XX
XX Example; Fig 1; 35pp; English.
XX
XX Nine peptides from the V3 regions of HIV-1 isolates IIB, RF and MN were
XX incorporated into tetraivalent multiple antigen peptide systems (MAPs)
XX (see AAR32406-14). Parallel groups of three peptides with chain lengths
XX spanning from 11-24 residues were synthesised in MAPS formate for each
XX isolate. ELIS assays demonstrated that antisera titers in mice were
XX closely related to the length of the IIB peptide used for the
XX immunisation - the longer the stronger the response. There was no
XX substantial antibody prodn. in mice against the other two series of
XX peptides, RF (B4-B6), and MN (B7-B9), except for a low reactivity in the
XX SP. Immunised with B8 (MN isolate). Specificity tests of the B cell
XX response demonstrated that the T cell epitope (AAR32415) also serves as a
XX B cell epitope. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX
SQ Sequence 17 AA;

Query Match 87.2%; Score 34; DB 2; Length 17;
Best Local Similarity 100.0%; Pred. No. 2;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RAFTVIG 7
   |||||
Db 11 RAFTVIG 17

RESULT 182
AAR68664
ID AAR68664 standard; peptide; 17 AA.
XX
XX AAR68664;
AC
XX 16-OCT-2003 (revised)
DT 25-MAR-2003 (revised)
DT 06-SEP-1995 (first entry)
XX
XX T cell epitope derived from V3 isolate LAI.
DE
XX T-cell; epitope; HIV-1; core protein; p24E; B-cell; antigen; gp160; gag;
KW pol; vaccine; multimeric peptide; AIDS; 3D organisation.
XX
XX Human immunodeficiency virus 1.
XX
XX WO9429339-A1.
XX
XX 22-DEC-1994.
XX
XX 08-JUN-1994; 94WO-CA000317.
XX

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XX 09-JUN-1993; 93US-00073378.
XX (CONN-) CONNNAUGHT LAB LTD.
XX S1a CDY, Chong P, Klein MH;
XX WPI; 1995-036400/05.
XX Novel tandem synthetic HIV-1 peptide(s) - comprising T-cell epitope of
XX gag protein linked to B-cell epitope of V3 loop protein of an HIV-1
XX isolate.
XX Disclosure; Page 39; 69pp; English.
XX This sequence represents a T-cell epitope derived from the V3 sequence of
XX the HIV-1 isolate LAI, which may be linked to a B-cell epitope from the
XX V3 (NM) loop from HIV-1. These chimeric peptides may then be used in the
XX production of HIV-1 vaccines. These peptide sequences may also be used in
XX the production of multimeric peptides in which the peptides are C-
XX terminally modified by the addition of a lys residue which is modified on
XX its epsilon amino acid to carry an additional copy of the peptide
XX molecule. The linear and multimeric peptides may be used for the
XX treatment of AIDS by acting to displace the binding of HIV virus to human
XX or animal cells or by disturbing the 3D organisation of the virus.
XX (Updated on 25-MAR-2003 to correct PN field.) (Updated on 16-OCT-2003 to
XX standardise OS field)
XX Sequence 17 AA;
XX
XX Query Match 87.2%; Score 34; DB 2; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 2;
XX Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 RAFTYIG 7
XX |||||
XX 11 RAFTYIG 17
XX
XX RESULT 183
XX AAM25834
XX ID AAM25834 standard; peptide; 17 AA.
XX AC AAM25834;
XX XX
XX DT 25-MAR-2003 (revised)
XX DT 20-OCT-1997 (first entry)
XX XX
XX DE HIV B-cell strain LAI env protein V3 loop peptide.
XX XX
XX KM HIV; human immunodeficiency virus; gag; T-cell; B-cell; epitope; env;
XX KM V3 loop; vaccine; determinant; chimeric.
XX OS Synthetic.
XX OS US5639854-A.
XX PD 17-JUN-1997.
XX PF 09-JUN-1994; 94US-00257528.
XX PR 09-JUN-1993; 93US-00073378.
XX PA (CONN-) CONNNAUGHT LAB LTD.
XX PI Klein MH, S1a CDY, Chong P;
XX DR WPI; 1997-332082/30.
XX PT Tandem synthetic HIV peptide(s) useful as immunogens - comprising gag
XX PT protein T-cell epitope linked to env protein B-cell epitope.
XX PS Disclosure; Col 21; 41pp; English.

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XX The invention relates to new synthetic peptides comprising at least one
XX amino acid sequence comprising an HIV gag protein T-cell epitope linked
XX at its C- or N-terminus to an amino acid sequence comprising a B-cell
XX epitope of the V3 loop of an HIV env protein, which can be used to
XX generate vaccines against HIV-1. The T-cell epitope sequence is pref.
XX selected from the T-helper determinant core peptides P24E, P24V, P24L,
XX P24M and P24H while the B-cell epitopes are derived from HIV strains
XX including CTRB-56, V3NM, CTRB-29, CTRB-55, SF2, LAI, IIB, RF, Z6, 2054,
XX 1174 and BX08. The peptides are chimeric and can be linked to a branched
XX lys backbone. This sequence represents the B-cell env protein V3 loop
XX peptide from HIV-1 strain LAI. (Updated on 25-MAR-2003 to correct PF
XX field.)
XX Sequence 17 AA;
XX
XX Query Match 87.2%; Score 34; DB 2; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 2;
XX Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 RAFTYIG 7
XX |||||
XX 11 RAFTYIG 17
XX
XX RESULT 184
XX AAM76848
XX ID AAM76848 standard; peptide; 17 AA.
XX AC AAM76848;
XX XX
XX DT 25-JAN-1999 (first entry)
XX XX
XX DE Fusion immunoglobulin heavy chain HIV gp120 B cell epitope #18.
XX XX
XX KM B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IGH;
XX KM human immune deficiency virus; HIV; tolerance; treatment; therapy;
XX KM prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;
XX KM microbial infection; autoimmune disease; antibody; apoptosis;
XX KM antiviral T cell immunity.
XX OS Mus sp.
XX OS Homo sapiens.
XX PN NO9836087-A1.
XX PD 20-AUG-1998.
XX PF 13-FEB-1998; 98MO-US002766.
XX PR 13-FEB-1997; 97US-0040581P.
XX PA (AMNA-) AMERICAN NAT RED CROSS.
XX PI Scott D, Zambidis E;
XX DR WPI; 1998-506315/43.
XX PT New fusion immunoglobulin heavy chain including gp120 epitopes and
XX PT related complete antibodies - DNA, vectors and transformed cells, used to
XX PT induce tolerance to the epitopes for treatment of human immune deficiency
XX PT virus infection.
XX PS Claim 10; Page 119; 154pp; English.
XX
XX This sequence is an epitope used in the construction of a novel fusion
XX immunoglobulin heavy chain (IGH) protein with a mammalian, especially
XX human, IGH chain fused in frame at its N-terminus to one or more human
XX immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or
XX transfected cells are used to tolerate subjects to gp120 epitopes and to
XX maintain this tolerance, particularly for treatment of HIV infection,
XX optionally together with other therapeutic/prophylactic agents such as
XX vaccines, chemotherapeutic agents and immune response modifiers. Such

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CC proteins can be used against other diseases where an immune response is  
 CC deleterious, e.g. microbial infection, tumours or autoimmune disease.  
 CC Induction of tolerance suppresses production of antibodies against gp120,  
 CC so prevents or inhibits 'bystander' apoptosis of uninfected T cells that  
 CC are bound to gp120 protein, maximizing induction of protective antiviral  
 CC T cell immunity

XX Sequence 17 AA;

Query Match

Best Local Similarity 87.2%; Score 34; DB 2; Length 17;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RAFTVIG 7  
 |||||  
 11 RAFTVIG 17

RESULT 185

AAW67350

ID AAW67350 standard; peptide; 17 AA.

XX AAW67350;

AC 17-OCT-2003 (revised)

DT 25-JAN-1999 (first entry)

XX HIV-1 strain LAI gp120 V3 loop epitope peptide.

XX Immunogen; vaccine; HIV-1; T-cell; B-cell; epitope; core protein; gp120;  
 KM V3 loop.

OS Human immunodeficiency virus 1.

XX US5817754-A.

PD 06-OCT-1998.

XX 05-JUN-1995; 95US-00464329.

PR 09-JUN-1993; 93US-00073378.

XX 09-JUN-1994; 94US-00257528.

PA (CONN-) CONNAUGHT LAB LTD.

XX Chong P, Klein MH, Sia CDY;

PI WPI; 1998-556461/47.

XX Synthetic human immunodeficiency virus-1 peptide(s) - containing T-cell  
 PT epitope and B-cell epitope(s) are candidate vaccines against HIV-1.

XX Disclosure; Col 21; 40pp; English.

XX The invention relates to a novel immunogenic composition for use in  
 CC vaccines for the treatment of HIV-1 comprising an HIV-1-derived T-cell  
 CC epitope linked to an HIV-1-derived B-cell epitope. The T-cell epitopes  
 CC are generally designed based on the p24 core protein and the B-cell  
 CC epitopes from the V3 loop of the gp120 protein from various HIV-1  
 CC strains. This peptide represents the V3 loop epitope from the HIV-1  
 CC strain LAI. (Updated on 17-OCT-2003 to standardise OS field)

XX Sequence 17 AA;

Query Match

Best Local Similarity 87.2%; Score 34; DB 2; Length 17;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RAFTVIG 7  
 |||||  
 11 RAFTVIG 17

RESULT 186

AAW99958

ID AAW99958 standard; peptide; 17 AA.

XX AAW99958;

DT 05-MAY-1999 (first entry)

XX HIV-1 vaccine synthetic peptide SEQ ID NO:35.

XX HIV-1; human immunodeficiency virus; vaccine; T-cell epitope;  
 KM gag protein; B-cell epitope; gp120 protein; chimeric; infection.

XX Synthetic.

OS Human immunodeficiency virus 1.

XX US5876731-A.

PD 02-MAR-1999.

XX 05-JUN-1995; 95US-00462507.

PR 09-JUN-1993; 93US-00073378.

XX 09-JUN-1994; 94US-00257528.

PA (CONN-) CONNAUGHT LAB LTD.

XX Chong P, Klein MH, Sia CDY;

PI WPI; 1999-189590/16.

XX Synthetic chimeric HIV polypeptides - comprising gag protein T-cell  
 PT epitope linked to gp120 B-cell epitope.

XX Example 1; Col 41-42; 41pp; English.

XX The present invention describes a synthetic peptide comprising an amino  
 CC acid sequence containing a T-cell epitope of an HIV gag protein linked at  
 CC its C terminus to an amino acid sequence containing a B-cell epitope of  
 CC an HIV gp120 protein and containing the amino acid sequence: X1KDWX2;  
 CC where X1 = E, A, G or Q, and X2 = A or T, or an amino acid sequence  
 CC capable of eliciting an HIV-specific antiserum and recognizing the  
 CC sequence X1KDWX2. The synthetic peptide is useful in vaccines against  
 CC HIV infection and in diagnostic applications. AAW98892 to AAW98906, and  
 CC AAW98899 to AAW98989 represent synthetic peptides from the present  
 CC invention

XX Sequence 17 AA;

Query Match 87.2%; Score 34; DB 2; Length 17;

Best Local Similarity 100.0%; Pred. No. 2;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RAFTVIG 7  
 |||||  
 11 RAFTVIG 17

RESULT 187

AA39756

ID AAY39756 standard; peptide; 17 AA.

XX AAY39756;

DT 17-OCT-2003 (revised)

DT 26-NOV-1999 (first entry)

XX HIV1 chimeric peptide V3-LAI.

XX HIV; vaccine; immunogenic composition; T cell epitope; B cell epitope;  
 KM infection; antibody; antiviral.

OS Human immunodeficiency virus 1.

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XX  US$951986-A.
XX  14-SEP-1999.
XX  06-JUN-1995; 95US-00467881.
XX  09-JUN-1993; 93US-00073378.
XX  09-JUN-1994; 94US-00257528.
XX  (CONN-) CONNAUGHT LAB LTD.
XX  Klein MH, Chong P, Sia CDY;
XX  WPI; 1999-550482/46.
XX  Immunogenic composition containing synthetic fusion polypeptides
XX  containing both the T and B cell epitopes of the human immunodeficiency
XX  virus, useful antigens in producing vaccines.
XX  Example 1; Col 22; 43pp; English.
XX  This sequence represents a fragment of a HIV1 protein, and can be used in
XX  the immunogenic composition of the invention. The composition comprises a
XX  synthetic fusion polypeptide which includes a sequence encoding 1 or more
XX  T cell epitopes and a sequence encoding 1 or more B cell epitopes and a
XX  carrier. Both the T cell and B cell epitopes are derived from HIV
XX  proteins. The compositions are useful as vaccines against HIV infection.
XX  The composition induces HIV-1-specific polyclonal antibodies that are
XX  opsonising and antiviral. The peptide components may be selected to
XX  induce a response against different viral isolates and in subjects who
XX  recognise different T cell epitopes. (updated on 17-OCT-2003 to
XX  standardise OS field)
XX  Sequence 17 AA:
XX  Query Match 87.2%; Score 34; DB 2; Length 17;
XX  Best Local Similarity 100.0%; Pred. No. 2;
XX  Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY  1 RAFVTTG 7
DB  11 RAFVTTG 17

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PA  (UYNY ) UNIV NEW YORK STATE.
PA  (YEDA ) YEDA RES & DEV CO LTD.
XX  Anglistar J, Sharon M, Schapira M, Zolla-Pazner S, Rosen O;
XX  WPI; 2004-625447/60.
XX  Composition for inhibiting HIV-1 infection, comprises isolated peptide
XX  molecule that mimics atomic structural conformation of V3 loop peptide of
XX  HIV-1 envelope glycoprotein that is bound to, and constrained by human
XX  monoclonal antibody.
XX  Claim 8; SEQ ID NO 28; 127pp; English.
XX  The present invention describes a composition (C1) which comprises an
XX  isolated peptide molecule or isostere that mimics the three-dimensional
XX  (3D) atomic structural conformation of the V3 loop peptide of the HIV-1
XX  envelope glycoprotein gp120 that is bound to, and constrained by, human
XX  monoclonal antibody (MAb) 447-52D, murine MAb 0.5 beta or an antigen
XX  binding fragment of the MAb, where the constrained V3 loop peptide
XX  differs in conformation from the same V3 loop peptide when it is in free
XX  form. Also described: (1) identifying (M1) from several existing
XX  compounds a molecule that is useful as an HIV-1 V3 loop immunogen or as
XX  an inhibitor of binding of HIV-1 to a chemokine receptor/HIV-1 co-
XX  receptor on the surface of a receptor-bearing target cell; (2) designing
XX  a molecule that is useful as an HIV-1 V3 loop immunogen or as an
XX  inhibitor of binding of HIV-1 to a chemokine receptor/HIV-1 co-receptor
XX  on the surface of a receptor-bearing target cell; (3) a composition (C2)
XX  that is useful as an HIV-1 V3 loop immunogen or as an inhibitor of
XX  binding of HIV-1 to a chemokine receptor/HIV-1 co-receptor on the surface
XX  of a receptor-bearing target cell; (4) an immunogenic composition (C3)
XX  for induction of an anti-HIV-1 antibody response specific for a V3 loop
XX  epitope, comprising (C1) and an excipient; (5) a pharmaceutical
XX  composition (C4) useful for blocking the interaction of HIV-1 with an R5
XX  or X4 co-receptor and thereby inhibiting HIV-1 infectivity, comprising
XX  (C1) and a carrier or excipient; (6) a computing platform for generating
XX  a 3D model of a constrained HIV V3 view peptide; (7) a computer generated
XX  model representing the conformationally constrained structure of a V3
XX  loop peptide that is bound to 447-52D or 0.5beta MAb or its antigen
XX  binding fragments, comprising a 3D atomic structure defined by NC+ and
XX  (8) a computer readable medium (CM) comprising, in a retrievable format,
XX  data that includes a set of structure coordinates defining a 3D structure
XX  of a V3 loop peptide that is conformationally constrained by being bound
XX  to 447-52D or 0.5beta MAb or its antigen binding fragment. (C1) has anti-
XX  HIV activities, and can be used in vaccines, and as an inhibitor of
XX  binding of HIV-1 to chemokine receptor/HIV-1 co-receptor. (C1) is useful
XX  for in vivo inhibition of HIV-1 infection. (C1) or (C2) is useful for
XX  producing a medicament utilised for treating or preventing HIV-1
XX  infection. (C3) or (C4) is useful for inducing in a subject an anti-HIV-1
XX  neutralising antibody response specific for a V3 loop epitope. (C4) is
XX  useful for preventing an HIV-1 infection in an uninfected subject at risk
XX  for such infection or for inhibiting viral spread and disease progression
XX  in an infected subject. The present sequence represents a peptide used in
XX  the exemplification of the present invention.
SQ  Sequence 17 AA:
XX  Query Match 87.2%; Score 34; DB 8; Length 17;
XX  Best Local Similarity 100.0%; Pred. No. 2;
XX  Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY  1 RAFVTTG 7
DB  11 RAFVTTG 17

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RESULT 189
AAR38526
ID  AAR38526 standard; peptide; 18 AA.
XX  AAR38526;
AC  AAR38526;
XX  25-MAR-2003 (revised)

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XX Human immunodeficiency virus 1.  
 OS Synthetic.  
 PN WO2004069863-A2.  
 PD 19-AUG-2004.  
 PF 04-FEB-2004; 2004WO-US003304.  
 PR 04-FEB-2003; 2003US-0444682P.  
 PA (UNYNY) UNIV NEW YORK STATE.  
 PA (YEDA) YEDA RES & DEV CO LTD.  
 PI Angilster J, Sharon M, Schapira M, Zolla-Pazner S, Rosen O;  
 DR WPI; 2004-625447/60.  
 XX  
 PT Composition for inhibiting HIV-1 infection, comprises isolated peptide  
 PT molecule that mimics atomic structural conformation of V3 loop peptide of  
 PT HIV-1 envelope glycoprotein that is bound to, and constrained by human  
 PT monoclonal antibody.  
 PS Disclosure; SEQ ID NO 4; 127pp; English.  
 XX  
 CC The present invention describes a composition (C1) which comprises an  
 CC isolated peptide molecule or isostere that mimics the three-dimensional  
 CC (3D) atomic structural conformation of the V3 loop peptide of the HIV-1  
 CC envelope glycoprotein gp120 that is bound to, and constrained by, human  
 CC monoclonal antibody (Mab) 447-52D, murine Mab 0.5 beta or an antigen  
 CC binding fragment of the Mab, where the constrained V3 loop peptide  
 CC differs in conformation from the same V3 loop peptide when it is in free  
 CC form. Also described: (1) identifying (M1) from several existing  
 CC compounds a molecule that is useful as an HIV-1 V3 loop immunogen or as  
 CC an inhibitor of binding of HIV-1 to a chemokine receptor/HIV-1 co-  
 CC receptor on the surface of a receptor-bearing target cell; (2) designing  
 CC a molecule that is useful as an HIV-1 V3 loop immunogen or as an  
 CC inhibitor of binding of HIV-1 to a chemokine receptor/HIV-1 co-receptor  
 CC on the surface of a receptor-bearing target cell; (3) a composition (C2)  
 CC that is useful as an HIV-1 V3 loop immunogen or as an inhibitor of  
 CC binding of HIV-1 to a chemokine receptor/HIV-1 co-receptor on the surface  
 CC of a receptor-bearing target cell; (4) an immunogenic composition (C3)  
 CC for induction of an anti-HIV-1 antibody response specific for a V3 loop  
 CC epitope, comprising (C1) and an excipient; (5) a pharmaceutical  
 CC composition (C4) useful for blocking the interaction of HIV-1 with an R5  
 CC or X4 co-receptor and thereby inhibiting HIV-1 infectivity, comprising  
 CC (C1) and a carrier or excipient; (6) a computing platform for generating  
 CC a 3D model of a constrained HIV V3 view peptide; (7) a computer generated  
 CC model representing the conformationally constrained structure of a V3  
 CC loop peptide that is bound to 447-52D or 0.5beta Mab or its antigen  
 CC binding fragments, comprising a 3D atomic structure defined by NC; and  
 CC (8) a computer readable medium (CM) comprising, in a retrievable format,  
 CC data that includes a set of structure coordinates defining a 3D structure  
 CC of a V3 loop peptide that is conformationally constrained by being bound  
 CC to 447-52D or 0.5beta Mab or its antigen binding fragment. (C1) has anti-  
 CC HIV activities, and can be used in vaccines, and as an inhibitor of  
 CC binding of HIV-1 to chemokine receptor/HIV-1 co-receptor. (C1) is useful  
 CC for in vivo inhibition of HIV-1 infection. (C1) or (C2) is useful for  
 CC producing a medicament utilized for treating or preventing HIV-1  
 CC infection. (C3) or (C4) is useful for inducing in a subject an anti-HIV-1  
 CC neutralizing antibody response specific for a V3 loop epitope. (C4) is  
 CC useful for preventing an HIV-1 infection in an uninfected subject at risk  
 CC for such infection or for inhibiting viral spread and disease progression  
 CC in an infected subject. The present sequence represents a peptide used in  
 CC the exemplification of the present invention.  
 XX  
 SQ Sequence 18 AA;  
 Query Match 87.2%; Score 34; DB 8; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 2.1;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTTIG 7  
 Db 12 RAFTTIG 18  
 RESULT 192  
 AAP90279  
 ID AAP90279 standard; protein; 20 AA.  
 XX  
 AC AAP90279;  
 XX  
 DT 09-SEP-2004 (revised)  
 DT 24-OCT-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 22-JUN-1990 (first entry)  
 XX  
 DE Peptide 132 of HIV env gene.  
 XX  
 KM HIV; AIDS; env gene; HIV vaccine; de.  
 XX  
 OS Simian-human immunodeficiency virus.  
 OS Unidentified.  
 XX  
 PN EP306219-A.  
 PD 08-MAR-1989.  
 XX  
 PF 25-AUG-1988; 88EP-00307889.  
 XX  
 PR 27-AUG-1987; 87US-00090080.  
 XX  
 PA (REPK) REPLIGEN CORP.  
 XX  
 PI Rusche JR, Putney SD, Jayaherian K, Farley J, Grimalta R, Lynn D;  
 PI Petro J, Okeffe T;  
 XX  
 DR WPI; 1989-070387/10.  
 XX  
 PT New HIV proteins and peptide(s) - used in diagnosis, prophylaxis or  
 PT therapy of AIDS, esp. for prepn. of vaccines against HIV infection.  
 XX  
 PS Claim 1; Page 27; 29pp; English.  
 XX  
 CC Protein derivative stimulates a lymphocyte proliferative response in HIV-  
 CC infected humans, providing a means of diagnosis, protection and  
 CC therapeutic value. (Updated on 25-MAR-2003 to correct PR field.) (Updated  
 CC on 25-MAR-2003 to correct PA field.) (Updated on 24-OCT-2003 to  
 CC standardise OS field)  
 CC  
 CC Revised record issued on 09-SEP-2004 : Correction to location  
 CC  
 XX  
 SQ Sequence 20 AA;  
 Query Match 87.2%; Score 34; DB 1; Length 20;  
 Best Local Similarity 87.5%; Pred. No. 2.3;  
 Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Qy 1 RAFTTIG 8  
 Db 3 RAFTTIG 10  
 RESULT 193  
 AAR25471  
 ID AAR25471 standard; protein; 20 AA.  
 XX  
 AC AAR25471;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 15-JAN-1993 (first entry)  
 XX  
 DE V3 loop structure.

KM Hepatitis B; surface antigen; AIDS; cytotoxic lymphocytes;  
 KM disulphide loop; variable region.  
 XX  
 OS Synthetic.  
 XX  
 PN W09211291-A1.  
 XX  
 PD 09-JUL-1992.  
 XX  
 PF 16-DEC-1991; 91MO-EP002422.  
 XX  
 PR 20-DEC-1990; 90GB-00027623.  
 PR 21-MAR-1991; 91GB-00005993.  
 XX  
 PA (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.  
 PI Van Wijnenale F, Baijot M, Prieels J;  
 XX  
 DR WPI; 1992-250032/30.  
 XX  
 PT New immunogenic hybrid polypeptide(s) for vaccine formulations - comprise  
 PT S antigen of hepatitis B linked via spacer to heterologous antigen, e.g.  
 PT gp from HSV or gp120 form HIV.  
 XX  
 PS Disclosure; Page 28; 38pp; English.  
 XX  
 CC The peptide sequence given represents the sequence from amino acid 310-  
 CC 328 of the external protein gp120 from HIV. This comprises a disulphide  
 CC loop in the third variable region. It was used in an example of the  
 CC invention and was incorporated into hepatitis B surface antigen (HBsAg)  
 CC particles. The hybrid formed in this reaction is useful as a vaccine for  
 CC the prophylactic treatment of various infectious diseases eg. AIDS.  
 CC Conjugation of this peptide with the HBsAg particle allows its processing  
 CC to be directed via a non-endosomal route. In this way the gp120 fragment  
 CC can be recognized by cytotoxic lymphocytes. (Updated on 25-MAR-2003 to  
 CC correct FN field.)  
 CC  
 XX  
 SQ Sequence 20 AA;  
 QY  
 Db 1 RAEFTIG 7  
 14 RAEFTIG 20  
 Query Match 87.2%; Score 34; DB 2; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 2.3;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 194  
 AAW76842  
 ID AAW76842 standard; peptide; 20 AA.  
 XX  
 AC AAW76842;  
 XX  
 DT 25-JAN-1999 (first entry)  
 XX  
 DE Fusion immunoglobulin heavy chain HIV gp120 B cell epitope #12.  
 XX  
 KM B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IgH;  
 KM human immune deficiency virus; HIV; tolerance; treatment; therapy;  
 KM prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;  
 KM microbial infection; autoimmune disease; antibody; apoptosis;  
 KM antiviral T cell immunity.  
 XX  
 OS Mus sp.  
 OS Homo sapiens.  
 XX  
 PN W09836087-A1.  
 XX  
 PD 20-AUG-1998.  
 XX  
 PF 13-FEB-1998; 98MO-US002766.  
 XX

PR 13-FEB-1997; 97US-0040581P.  
 XX  
 PA (AMNA-) AMERICAN NAT RED CROSS.  
 XX  
 PI Scott D, Zambidis E;  
 XX  
 DR WPI; 1998-506315/43.  
 XX  
 PT New fusion immunoglobulin heavy chain including gp120 epitopes and  
 PT related complete antibodies - DNA, vectors and transformed cells, used to  
 PT induce tolerance to the epitopes for treatment of human immune deficiency  
 PT virus infection.  
 XX  
 PS Claim 10; Page 119; 154pp; English.  
 XX  
 CC This sequence is an epitope used in the construction of a novel fusion  
 CC immunoglobulin heavy chain (IGH) protein with a mammalian, especially  
 CC human, IgH chain fused in frame at its N-terminus to one or more human  
 CC immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or  
 CC transfected cells are used to tolerate subjects to gp120 epitopes and to  
 CC maintain this tolerance, particularly for treatment of HIV infection.  
 CC optionally together with other therapeutic/prophylactic agents such as  
 CC vaccines, chemotherapeutic agents and immune response modifiers. Such  
 CC proteins can be used against other diseases where an immune response is  
 CC deleterious, e.g. microbial infection, tumours or autoimmune disease.  
 CC Induction of tolerance suppresses production of antibodies against gp120,  
 CC so prevents or inhibits 'bystander' apoptosis of uninfected T cells that  
 CC are bound to gp120 protein, maximising induction of protective antiviral  
 CC T cell immunity  
 CC  
 XX  
 SQ Sequence 20 AA;  
 QY  
 Db 1 RAEFTIG 7  
 14 RAEFTIG 20  
 Query Match 87.2%; Score 34; DB 2; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 2.3;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 195  
 ABP57070  
 ID ABP57070 standard; peptide; 20 AA.  
 XX  
 AC ABP57070;  
 XX  
 DT 23-OCT-2003 (revised)  
 DT 14-APR-2003 (first entry)  
 XX  
 DE HIV gp120 V3 loop derived peptide ARP740/28.  
 XX  
 KM Anti-human leukocyte antigen antibody; anti-HLA antibody; anti-HIV;  
 KM proliferative immune response; anti-inflammatory; neuroprotective;  
 KM cytoskeletal; gene therapy; vaccine; inflammatory disease; nerve damage;  
 KM autoimmune disease; axonal damage; cancer; inflammatory; HIV.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN W0200304049-A2.  
 XX  
 PD 16-JAN-2003.  
 XX  
 PF 02-JUL-2002; 2002MO-GB003037.  
 XX  
 PR 02-JUL-2001; 2001GB-00016151.  
 PR 23-NOV-2001; 2001GB-00028638.  
 PR 28-JAN-2002; 2002GB-00001896.  
 PR 28-MAR-2002; 2002GB-00007509.  
 XX  
 PA (ICEB-) ICE BIOLOGICS LTD.  
 XX  
 PI Dalglish AG, Cadogan M, Heeney J, White SDT;

XX WPI; 2003-210314/20.  
 DR  
 XX  
 PT Use of anti-HLA antibody for the preparation of a medicament for treating  
 PT a disease involving a proliferative immune response e.g. HIV,  
 PT inflammatory diseases, autoimmune diseases, axonal/nerve damage or  
 PT related impairment, cancers.  
 XX  
 PS Example; Page 41; 69pp; English.  
 XX  
 CC The present invention describes an anti-human leukocyte antigen (HLA)  
 CC antibody (I) useful for the preparation of a medicament for treating a  
 CC disease involving a proliferative immune response. (I) has anti-HIV,  
 CC anti-inflammatory, neuroprotective and cytostatic activities, and can be  
 CC used in vaccines and in gene therapy. The antibody (I) is useful for the  
 CC preparation of a medicament for treating diseases involving a  
 CC proliferative immune response, e.g. HIV, inflammatory diseases,  
 CC autoimmune diseases, axonal or nerve damage or related impairment or  
 CC cancers, and other diseases or conditions with an inflammatory component.  
 CC The present sequence represents an HIV gp120 V3 loop derived peptide,  
 CC which is used in the exemplification of the present invention. (Updated  
 CC on 23-Oct-2003 to standardise OS field)  
 CC  
 SQ Sequence 20 AA;  
 Query Match 87.2%; Score 34; DB 6; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 2.3;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RAFTTIG 7  
 |||||  
 Db 14 RAFTTIG 20  
 RESULT 196  
 ID AAR66425  
 AAR66425 standard; peptide; 15 AA.  
 AC AAR66425;  
 DT 25-MAR-2003 (revised)  
 DT 03-AUG-1995 (first entry)  
 XX  
 DE HIV-1 IIB peptide 18-10.  
 XX  
 KM T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KM human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KM cluster peptide; principal neutralising determinant.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9426785-A1.  
 XX  
 PD 24-NOV-1994.  
 XX  
 PF 13-MAY-1994; 94MO-US005142.  
 XX  
 PR 14-MAY-1993; 93US-00060988.  
 XX  
 PA (USSH ) US SEC DEPT HEALTH.  
 PI Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M,  
 DR WPI; 1995-006707/01.  
 XX  
 PT Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 XX  
 PS Example 1; Page 33; 120pp; English.  
 CC Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC in the HIV-1 IIB sequence (AAR66414) to test the effect of each residue

CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCUS 3-18 and PCUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substd. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRAF). In peptide 18-10, the Phe residue at  
 CC position 10 in peptide 18 has been replaced by a Ile residue. (Updated on  
 CC 25-MAR-2003 to correct PN field.)  
 CC  
 SQ Sequence 15 AA;  
 Query Match 84.6%; Score 33; DB 2; Length 15;  
 Best Local Similarity 87.5%; Pred. No. 2.9;  
 Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 RAFTTIG 8  
 |||||  
 Db 8 RAFTTIG 15  
 RESULT 197  
 ID AAR66429  
 AAR66429 standard; peptide; 15 AA.  
 AC AAR66429;  
 DT 25-MAR-2003 (revised)  
 DT 03-AUG-1995 (first entry)  
 XX  
 DE HIV-1 IIB peptide 18-14.  
 XX  
 KM T cell helper site; cytotoxic T cell response; neutralising antibody;  
 KM human immunodeficiency virus type 1; envelope glycoprotein gp120;  
 KM cluster peptide; principal neutralising determinant.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9426785-A1.  
 XX  
 PD 24-NOV-1994.  
 XX  
 PF 13-MAY-1994; 94MO-US005142.  
 XX  
 PR 14-MAY-1993; 93US-00060988.  
 XX  
 PA (USSH ) US SEC DEPT HEALTH.  
 PI Berzofsky JA, Ahlers JD, Pendleton CD, Nara P, Shirai M,  
 DR WPI; 1995-006707/01.  
 XX  
 PT Polypeptide inducing helper T cell, cytotoxic T cell and antibodies  
 PT responses - to target antigen in hosts of different MHC haplotypes, esp.  
 PT for therapeutic or prophylactic vaccines against HIV.  
 XX  
 PS Example 1; Page 33; 120pp; English.  
 CC Single residues from the HIV-1 RF sequence (AAR66415) replaced residues  
 CC in the HIV-1 IIB sequence (AAR66414) to test the effect of each residue  
 CC on the binding of neutralising and non-neutralising sera from animals  
 CC immunised with the cluster peptides PCUS 3-18 and PCUS 6-18 (see  
 CC AAR66409 and AAR66411). Analysis of the substituted peptides (AAR66416-  
 CC R66430) showed that binding was enhanced over peptide 18 control when a  
 CC tyrosine was substd. for a Val at position 11 and substns. at positions  
 CC 12,13,14 and 15 revealed a similar enhancement. Binding of both groups of  
 CC sera was reduced when substns. were made in the principal neutralising  
 CC determinant sequence (PGRAF). In peptide 18-14, the Gly residue at  
 CC position 14 in peptide 18 has been replaced by an Ala residue. (Updated  
 CC on 25-MAR-2003 to correct PN field.)  
 CC  
 SQ Sequence 15 AA;

Query Match 84.6%; Score 33; DB 2; Length 15;  
 Best Local Similarity 87.5%; Pred. No. 2.9;  
 Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 RAFTTIGK 8  
 |||||  
 Db 8 RAFTTIAK 15

## RESULT 198

ABB05778 standard; peptide; 7 AA.

ABB05778;

29-AUG-2003 (revised)  
 07-MAY-2002 (first entry)

HIV gp120 related peptide SEQ ID NO:4.

Polyfunctional base sequence; microgene; industrial; cell culture;  
 artificial matrix protein; transgenic animal; HIV.

Human immunodeficiency virus 1.

WO200196558-A1.

20-DEC-2001.

15-JUN-2001; 2001WO-JP005116.

16-JUN-2000; 2000JP-00180997.

(NISC-) JAPAN SCI & TECHNOLOGY CORP.

Shiba K;

WPI; 2002-098069/13.

Polyfunctional base sequence having two or more functions in different  
 reading frames, useful for producing artificial matrix proteins for cell  
 culture.

Example 1; Page 47; 61pp; Japanese.

The present invention describes a polyfunctional base sequence (NI)  
 having two or more functions in different reading frames. Also described  
 are: (1) a method for producing NI and artificial gene expression vectors  
 comprising NI; (2) transgenic non-human animals comprising NI; and (3)  
 treatments and diagnostic reagents containing an artificial protein,  
 artificial tissues or high molecular weight artificial proteins. NI is  
 useful for creating industrially useful artificial matrix proteins for  
 cell culture. The present sequence represents a peptide which is used in  
 an example from the present invention. (Updated on 29-AUG-2003 to  
 standardise OS field)

Sequence 7 AA;

Query Match 76.9%; Score 30; DB 5; Length 7;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3 FVTIGK 8  
 |||||  
 Db 1 FVTIGK 6

## RESULT 199

AA015660 standard; peptide; 7 AA.

AA015660;  
 AC AA015660;

XX 08-NOV-2002 (first entry)

XX Strong immune response induction-related peptide 4.

XX Strong immune response induction; high-order protein structure formation;  
 antigen presentation; HIV.

XX Unidentified.

XX WO200233074-A1.

XX 25-APR-2002.

XX 10-OCT-2001; 2001WO-JP008893.

XX 13-OCT-2000; 2000JP-00314288.

XX (NISC-) JAPAN SCI & TECHNOLOGY CORP.

XX Shiba K, Ohno T;

XX WPI; 2002-519151/55.

XX Artificial protein capable of inducing a strong immune response to a  
 peptide group for assisting antibody production in vivo to viruses and  
 other antigens.

XX Example 1; Page 46; 77pp; Japanese.

XX The invention comprises an artificial protein which induces a strong  
 immune response to a peptide group (the protein contains all or part of  
 the peptide group). The artificial protein assists the formation of high-  
 order protein structure and/or assists the antigen presentation of  
 immunocompetent cells. The artificial protein of the invention is useful  
 for inducing a strong immune response and the preparation of effective  
 antibodies to specific antigens, especially HIV. The present amino acid  
 sequence represents a peptide that was used in the invention

XX Sequence 7 AA;

Query Match 76.9%; Score 30; DB 5; Length 7;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3 FVTIGK 8  
 |||||  
 Db 1 FVTIGK 6

## RESULT 200

AAW38251 standard; peptide; 15 AA.

AAW38251;

19-MAR-1998 (first entry)

XX Carboxy-terminal of GPGR crest.

XX Multivalent chimeric peptide; tandem repeat unit; human; mucin 1; MUC1;  
 Omega loop sequence; prophylaxis; therapy; GPGR crest;

XX pathogenic virus neutralisation; human immunodeficiency virus; HIV.

XX Homo sapiens.

XX WO9728187-A2.

XX 07-AUG-1997.

XX 29-JAN-1997; 97WO-US001726.

XX 31-JAN-1996; 96US-00594403.



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PR 15-OCT-1996; 96US-00730244.
XX (POPU-) POPULATION COUNCIL INC.
XX
XX Fontenot JD, Phillips DM;
XX
XX WPI; 1997-402551/37.
XX
XX New multivalent chimeric peptide(s) for neutralising pathogenic microbes
XX - comprising a loop structure of human mucin 1 and an omega loop of an
XX immunoglobulin superfamily protein.
XX
XX Example 2; Page 39; 63pp; English.
XX
XX The present sequence was used in the development of a novel multivalent
XX chimeric peptide, comprising at least 2 tandemly repeated units, where
XX the 1st portion of the repeated unit comprises a human mucin 1 (MUC1)
XX sequence which forms an extended connector and a base of a loop structure
XX of human MUC1, and a 2nd portion comprising an immunoglobulin super
XX family protein Omega loop sequence. In the peptide, the natural structure
XX of MUC1 tandem repeats can be used to present an Omega loop sequence in a
XX functional conformation that is both multivalent and biologically active.
XX It can provide prophylactic and therapeutic agents which have the binding
XX specificity of an immunoglobulin super family member protein but do not
XX have the entire protein's backbone. It can be used to neutralise
XX pathogenic viruses, e.g. human immunodeficiency virus (HIV)
XX
XX Sequence 15 AA;
XX
XX Query Match 76.9%; Score 30; DB 2; Length 15;
XX Best Local Similarity 100.0%; Pred. No. 14;
XX Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 3 FVTIGK 8
XX |||||
XX 1 FVTIGK 6
XX
XX Db
XX
XX RESULT 201
XX AAW76971
XX ID AAW76971 standard; peptide; 15 AA.
XX
XX AC AAW76971;
XX
XX DT 25-JAN-1999 (first entry)
XX
XX DE Fusion immunoglobulin heavy chain HIV gp120 T cell epitope #40.
XX
XX KM B cell; T cell; epitope; immunoglobulin; heavy chain; gp120; IGH;
XX human immune deficiency virus; HIV; tolerance; treatment; therapy;
XX prophylaxis; vaccine; chemotherapy; immune response; modifier; tumour;
XX microbial infection; autoimmune disease; antibody; apoptosis;
XX antiviral T cell immunity.
XX
XX OS Mus sp.
XX Homo sapiens.
XX
XX PN WO9836087-A1.
XX
XX PD 20-AUG-1998.
XX
XX PF 13-FEB-1998; 98MO-US002766.
XX
XX PR 13-FEB-1997; 97US-0040581P.
XX
XX (AMNA-) AMERICAN NAT RED CROSS.
XX
XX PI Scott D, Zambidis E;
XX
XX WPI; 1998-506315/43.
XX
XX New fusion immunoglobulin heavy chain including gp120 epitopes and
XX related complete antibodies - DNA, vectors and transformed cells, used to

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PT induce tolerance to the epitopes for treatment of human immune deficiency
XX virus infection.
XX
XX PS Disclosure; Page 41; 154pp; English.
XX
XX This sequence is an epitope used in the construction of a novel fusion
XX immunoglobulin heavy chain (IGH) protein with a mammalian, especially
XX human, IGH chain fused in frame at its N-terminus to one or more human
XX immune deficiency virus (HIV) gp120 epitopes. Fusion Ig proteins and/or
XX transfectant cells are used to tolerate subjects to gp120 epitopes and to
XX maintain this tolerance, particularly for treatment of HIV infection,
XX optionally together with other therapeutic/prophylactic agents such as
XX vaccines, chemotherapeutic agents and immune response modifiers. Such
XX proteins can be used against other diseases where an immune response is
XX deleterious, e.g. microbial infection, tumours or autoimmune disease.
XX Induction of tolerance suppresses production of antibodies against gp120,
XX so prevents or inhibits 'bystander' apoptosis of uninfected T cells that
XX are bound to gp120 protein, maximising induction of protective antiviral
XX T cell immunity
XX
XX Sequence 15 AA;
XX
XX Query Match 76.9%; Score 30; DB 2; Length 15;
XX Best Local Similarity 100.0%; Pred. No. 14;
XX Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 3 FVTIGK 8
XX |||||
XX 1 FVTIGK 6
XX
XX Db
XX
XX RESULT 202
XX AAR90229
XX ID AAR90229 standard; peptide; 15 AA.
XX
XX AC AAR90229;
XX
XX DT 06-APR-1996 (first entry)
XX
XX DE Cyclic HIV PND peptide attached to annular antigen scaffold.
XX
XX KM annular antigen scaffold core; AASC; HIV V3 loop; lysine;
XX principal neutralising determinant; PND; cyclic; vaccine.
XX
XX OS Synthetic.
XX
XX FH Key
XX Modified-site 1 Location/Qualifiers
XX
XX FT /note= "This residue is bonded to the thiol sulphur of
XX Cys(13) via a -CO-CH2- linkage, formed by introducing a
XX bromoacetyl group onto the N-terminal and allowing the Br
XX to condense with the Cys side chain"
XX Modified-site 13
XX FT /note= "see above"
XX Modified-site 15
XX FT /note= "this is an epsilon-lys residue, the alpha-amino
XX and carboxy terminals of which are incorporated into an
XX annular antigen scaffold core of formula KKKCK as
XX described in AAR90224"
XX
XX GB282813-A.
XX
XX PD 19-APR-1995.
XX
XX PF 07-OCT-1994; 94GB-00020263.
XX
XX PR 15-OCT-1993; 93US-00138514.
XX
XX (MERI ) MERCK & CO INC.
XX
XX Cunningham B, Hannah J, Tolman RL;
XX
XX WPI; 1995-141219/19.
XX
XX DR

```

XX New poly:lysine annular core for carrying epitope(s) - esp HIV V3 loop  
 PT peptide, gonadotropin releasing hormone, malarial or bacterial peptide,  
 PT useful in vaccines.  
 PS Claim 5, Page 49; 52pp; English.  
 XX  
 CC New annular antigen scaffold cores are provided for antigens or epitopes  
 CC such as HIV V3 loop peptides (e.g. the present sequence, but see also  
 CC GB2282815; AAR90219 - AAR90223), GnRH peptides, malaria antigenic  
 CC peptides or bacterial capsular polysaccharides. The scaffolds comprise a  
 CC ring of 3-10 lys residues cyclised via a thioether linkage. The epitopes  
 CC or antigens are bonded to each of the lys side-chain amino groups. The C-  
 CC terminus of the scaffold may be linked to a moiety such as beta-alanine  
 CC or a peptide providing a T cell epitope, a lipopeptide which may provide  
 CC an adjuvant effect, or another moiety providing a carrier function. The  
 CC scaffolds constitute effective synthetic vaccines. The present sequence  
 CC represents one of four identical thioether-cyclised HIV V3 loop peptides  
 CC which are attached to each of the four lys residues in the the annular  
 CC scaffold core described in AAR90224  
 CC  
 XX Sequence 15 AA;  
 SO  
 Query Match 74.4%; Score 29; DB 2; Length 15;  
 Best Local Similarity 75.0%; Pred. No. 23;  
 Matches 6; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1 RAFTTIG 8  
 DB 8 RAFTTIG 15  
 XX  
 RESULT 203  
 AAM32887  
 ID AAM32887 standard; peptide; 15 AA.  
 XX  
 AC AAM32887;  
 XX  
 DT 16-JAN-1998 (first entry)  
 XX  
 DE HIV envelope glycoprotein 120 T cell epitope P10.  
 XX  
 KM Hydrophilic; antigenic determinant; HIV; envelope; glycoprotein; env; gp;  
 KM recognition; B lymphocyte; type specific; antibody; vaccine; protection;  
 KM immune response; infection; neutralisation; epitope.  
 XX  
 OS Human immunodeficiency virus.  
 XX  
 PN WO9714436-A1.  
 XX  
 PD 24-APR-1997.  
 XX  
 PF 18-OCT-1996; 96WO-US016911.  
 XX  
 PR 20-OCT-1995; 95US-00546515.  
 PR 09-FEB-1996; 96US-00599266.  
 XX  
 PA (UYDU-) UNIV DUKE.  
 XX  
 PI Haynes BF, Palker TJ;  
 XX  
 DR WPI; 1997-244862/22.  
 XX  
 PT Synthetic human immunodeficiency virus vaccine - comprising hydrophilic  
 PT peptide corresponding to at least 1 antigenic determinant of envelope  
 PT glycoprotein recognised by B lymphocytes.  
 XX  
 PS Disclosure; Page 27; 104pp; English.  
 XX  
 CC An essentially pure hydrophilic peptide, comprising at least 1 antigenic  
 CC determinant of human immunodeficiency virus (HIV) envelope (env)  
 CC glycoprotein (gp) recognised by B lymphocytes, when covalently linked to  
 CC a carrier molecule, i.e. the present sequence, induces the production of

CC high titres of protective, type specific anti-HIV antibodies (Ab) in a  
 CC mammal. The peptide can be used in vaccines for producing a protective  
 CC immune response to HIV infection, while a HIV neutralising Ab can be  
 CC induced in a primate by administering a composition comprising HIV env  
 CC peptides that disrupt gp120/gp41 interactions  
 CC  
 XX Sequence 15 AA;  
 SO  
 Query Match 74.4%; Score 29; DB 2; Length 15;  
 Best Local Similarity 87.5%; Pred. No. 23;  
 Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 RAFTTIG 8  
 DB 8 RAFTTIG 15  
 XX  
 RESULT 204  
 AAM55971  
 ID AAM55971 standard; peptide; 15 AA.  
 XX  
 AC AAM55971;  
 XX  
 DT 29-SEP-1998 (first entry)  
 XX  
 DE Map kinase kinase 3 (MKK3) N-terminal peptide.  
 XX  
 KM Stress-activated protein kinase 4; SAPK4; pituitary gland; asthma;  
 KM stress activated kinase kinase 3; SKK3; rheumatoid arthritis; psoriasis;  
 KM inflammatory disease; immunoprecipitation; MKK3; map kinase kinase 3.  
 XX  
 OS Synthetic.  
 OS Unidentified.  
 XX  
 PN WO9815618-A1.  
 XX  
 PD 16-APR-1998.  
 XX  
 PF 09-OCT-1997; 97WO-GB002779.  
 XX  
 PR 09-OCT-1996; 96GB-00021096.  
 PR 15-MAY-1997; 97GB-00009781.  
 XX  
 PA (MED1-) MEDICAL RES COUNCIL.  
 XX  
 PI Cohen P, Goedert M;  
 XX  
 DR WPI; 1998-240806/21.  
 XX  
 PT New stress-activated protein kinase 4 - useful in drug screening, for,  
 PT e.g. anti-inflammatory, anti-cancer and immuno-suppressing agents.  
 XX  
 PS Example 4; Page 63; 119pp; English.  
 XX  
 CC The map kinase kinase 3 (MKK3) N-terminal peptide was used to raise  
 CC polyclonal anti-MKK3 antibodies. These antibodies were used in the  
 CC immunoprecipitation of stress-activated protein kinases (SAPK). The  
 CC invention claims for the human SAPK4 cDNA (AAV6081) isolated from a  
 CC human pituitary gland cDNA library. The invention also claims that SAPK4  
 CC protein (AAM55967) can be useful in a screening assay for identifying  
 CC agents that inhibit its activity and/or agents that block its activation  
 CC through stress activated kinase kinase 3 (SKK3). Therefore, the agents  
 CC identified in the assays may be potentially useful for treating  
 CC inflammatory diseases, e.g. rheumatoid arthritis, asthma and psoriasis  
 CC  
 XX Sequence 15 AA;  
 SO  
 Query Match 74.4%; Score 29; DB 2; Length 15;  
 Best Local Similarity 71.4%; Pred. No. 23;  
 Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 RAFTTIG 7  
 DB 1 RAFTTIG 7

Db 6 RTFITTIG 12

# RESULT 205

AAW68680 AAW68680 standard; peptide; 20 AA.

XX AAW68680;

XX 16-OCT-2003 (revised)

DT 25-MAR-2003 (revised)

XX 07-SEP-1995 (first entry)

XX B cell epitope, LAI.

DE T-cell; epitope; HIV-1 core protein; p24E; B-cell; antigen; gp160; gag;

XX pol; vaccine; multimeric peptide; AIDS; 3D organisation.

XX Human immunodeficiency virus 1.

XX WO9428339-A1.

XX 22-DEC-1994.

XX 08-JUN-1994; 94WO-CA000317.

XX 09-JUN-1993; 93US-00073378.

XX (CONN-) CONNUGHT LAB LTD.

XX Sia CDY, Chong P, Klein MH;

XX WPI; 1995-036400/05.

XX Novel tandem synthetic HIV-1 peptide(s) - comprising T-cell epitope of

XX gag protein linked to B-cell epitope of V3 loop protein of an HIV-1

XX isolate.

XX Disclosure; Page 16; 69pp; English.

XX This sequence represents a B-cell epitope sequence derived from the V3

XX loop of the HIV-1 isolate, LAI. This B-cell epitope may be linked to a T-

XX cell epitope also derived from HIV-1. These chimeric peptides may then be

XX used in the production of HIV-1 vaccines. These peptide sequences may

XX also be used in the production of multimeric peptides in which the

XX peptides are C-terminally modified by the addition of a lys residue which

XX is modified on its epsilon amino acid to carry an additional copy of the

XX peptide molecule. The linear and multimeric peptides may be used for the

XX treatment of AIDS by acting to displace the binding of HIV virus to human

XX or animal cells or by disturbing the 3D organisation of the virus.

XX (Updated on 25-MAR-2003 to correct PN field.) (Updated on 16-OCT-2003 to

XX standardise OS field)

XX Sequence 20 AA;

XX Query Match 74.4%; Score 29; DB 2; Length 20;

XX Best Local Similarity 85.7%; Pred. No. 31;

XX Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

XX QY 1 RAFTTIG 7

XX Db 14 RAFTTIG 20

# RESULT 206

AAW25898 AAW25898 standard; peptide; 20 AA.

XX AAW25898;

XX 25-MAR-2003 (revised)

DT 22-OCT-1997 (first entry)

XX

DE HIV-1 strain IIB env protein V3 loop B-cell epitope.

XX HIV; human immunodeficiency virus; gag; T-cell; B-cell; epitope; env;

XX V3 loop; vaccine; determinant; chimeric.

XX Synthetic.

XX US639854-A.

XX 17-JUN-1997.

XX 09-JUN-1994; 94US-00257528.

XX 09-JUN-1993; 93US-00073378.

XX (CONN-) CONNUGHT LAB LTD.

XX Klein MH, Sia CDY, Chong P;

XX WPI; 1997-332082/30.

XX Tandem synthetic HIV peptide(s) useful as immunogens - comprising gag

XX protein T-cell epitope linked to env protein B-cell epitope.

XX Claim 8; Col 74; 41pp; English.

XX The invention relates to new synthetic peptides comprising at least one

XX amino acid sequence comprising an HIV gag protein T-cell epitope linked

XX at its C- or N-terminus to an amino acid sequence comprising a B-cell

XX epitope of the V3 loop of an HIV env protein, which can be used to

XX generate vaccines against HIV-1. The T-cell epitope sequence is pref.

XX selected from the T-helper determinant core peptides P24E, P24N, P24L,

XX P24M and P24H while the B-cell epitopes are derived from HIV strains

XX including CTB-56, V3NM, CTB-29, CTB-55, SF2, LAI, IIB, RF, Z6, 2054,

XX CC 1714 and BX08. The peptides are chimeric and can be linked to a branched

XX lys backbone. This sequence represents the HIV-1 strain IIB env protein

XX V3 loop B-cell epitope. (Updated on 25-MAR-2003 to correct PF field.)

XX Sequence 20 AA;

XX Query Match 74.4%; Score 29; DB 2; Length 20;

XX Best Local Similarity 85.7%; Pred. No. 31;

XX Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

XX QY 1 RAFTTIG 7

XX Db 14 RAFTTIG 20

XX RESULT 207

AAW25850 AAW25850 standard; peptide; 20 AA.

XX AAW25850;

XX 25-MAR-2003 (revised)

DT 20-OCT-1997 (first entry)

XX HIV-1 strain LAI env protein V3 loop B-cell epitope.

XX HIV; human immunodeficiency virus; gag; T-cell; B-cell; epitope; env;

XX V3 loop; vaccine; determinant; chimeric.

XX Synthetic.

XX US639854-A.

XX 17-JUN-1997.

XX 09-JUN-1994; 94US-00257528.

XX 09-JUN-1993; 93US-00073378.

XX

PA (CONN-) CONNAUGHT LAB LTD.  
 XX Klein MH, Sia CDY, Chong P;  
 XX WPI; 1997-332082/30.  
 DR  
 XX Tandem synthetic HIV peptide(s) useful as immunogens - comprising gag  
 PT protein T-cell epitope linked to env protein B-cell epitope.  
 PS  
 XX Claim 8; Col 74; 41pp; English.  
 CC The invention relates to new synthetic peptides comprising at least one  
 CC amino acid sequence comprising an HIV gag protein T-cell epitope linked  
 CC at its C- or N-terminus to an amino acid sequence comprising a B-cell  
 CC epitope of the V3 loop of an HIV env protein, which can be used to  
 CC generate vaccines against HIV-1. The T-cell epitope sequence is pref.  
 CC selected from the T-helper determinant core peptides P24B, P24N, P24L,  
 CC P24W and P24H while the B-cell epitopes are derived from HIV strains  
 CC including CTB-56, V3MN, CTLB-29, CTLB-55, SF2, LAI, IIB, RF, Z6, 2054,  
 CC 1714 and BX08. The peptides are chimeric and can be linked to a branched  
 CC lye backbone. This sequence represents the HIV-1 strain LAI env protein  
 CC V3 loop B-cell epitope. (Updated on 25-MAR-2003 to correct PF field.)  
 CC  
 XX  
 SQ Sequence 20 AA;  
 Query Match 74.4%; Score 29; DB 2; Length 20;  
 Best Local Similarity 85.7%; Pred. No. 31;  
 Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Oy 1 RAFYITG 7  
 ||| |||  
 14 RAFYITG 20  
 Db  
 RESULT 208  
 AAW67366  
 ID AAW67366 standard; peptide; 20 AA.  
 XX  
 AC AAW67366;  
 XX  
 DT 17-OCT-2003 (revised)  
 DT 25-JAN-1999 (first entry)  
 XX  
 XX HIV-1 strain LAI V3 loop peptide epitope.  
 DE  
 XX Immunogen; vaccine; HIV-1; T-cell; B-cell; epitope; core protein; gp120;  
 KM V3 loop.  
 KM  
 XX Human immunodeficiency virus 1.  
 OS  
 XX  
 PN US5817754-A.  
 XX  
 PD 06-OCT-1998.  
 XX  
 PF 05-JUN-1995; 95US-00464329.  
 XX  
 XX 09-JUN-1993; 93US-00073378.  
 PR  
 PR 09-JUN-1994; 94US-00257528.  
 XX  
 XX (CONN-) CONNAUGHT LAB LTD.  
 PA  
 XX Chong P, Klein MH, Sia CDY;  
 PI  
 XX WPI; 1998-556461/47.  
 DR  
 XX  
 XX Synthetic human immunodeficiency virus-1 peptide(s) - containing T-cell  
 PT epitope and B-cell epitope(s) are candidate vaccines against HIV-1.  
 XX  
 PS Disclosure; Col 9; 40pp; English.  
 XX  
 CC The invention relates to a novel immunogenic composition for use in  
 CC vaccines for the treatment of HIV-1 comprising an HIV-1-derived T-cell  
 CC epitope linked to an HIV-1-derived B-cell epitope. The T-cell epitopes

CC are generally designed based on the p24 core protein and the B-cell  
 CC epitopes from the V3 loop of the gp120 protein from various HIV-1  
 CC strains. This peptide corresponds to the V3 loop peptide epitope from the  
 CC HIV-1 strain LAI. The peptide is used to generate a hybrid T- and B-cell  
 CC epitope (AAW67353). (Updated on 17-OCT-2003 to standardise OS field)  
 CC  
 XX  
 SQ Sequence 20 AA;  
 Query Match 74.4%; Score 29; DB 2; Length 20;  
 Best Local Similarity 85.7%; Pred. No. 31;  
 Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Oy 1 RAFYITG 7  
 ||| |||  
 14 RAFYITG 20  
 Db  
 RESULT 209  
 AAW99974  
 ID AAW99974 standard; peptide; 20 AA.  
 XX  
 AC AAW99974;  
 XX  
 DT 05-MAY-1999 (first entry)  
 DT  
 XX HIV-1 vaccine synthetic peptide SEQ ID NO:51.  
 DE  
 XX HIV-1; human immunodeficiency virus; vaccine; T-cell epitope;  
 KM gag protein; B-cell epitope; gp120 protein; chimeric; infection.  
 KM  
 XX Synthetic.  
 OS  
 OS Human immunodeficiency virus 1.  
 XX  
 PN US5876731-A.  
 XX  
 PD 02-MAR-1999.  
 XX  
 PF 05-JUN-1995; 95US-00462507.  
 XX  
 PR 09-JUN-1993; 93US-00073378.  
 PR  
 PR 09-JUN-1994; 94US-00257528.  
 XX  
 XX (CONN-) CONNAUGHT LAB LTD.  
 PA  
 XX Chong P, Klein MH, Sia CDY;  
 PI  
 XX WPI; 1999-189590/16.  
 DR  
 XX Synthetic chimeric HIV polypeptides - comprising gag protein T-cell  
 PT epitope linked to gp120 B-cell epitope.  
 XX  
 PS Example 1; Col 49-50; 41pp; English.  
 XX  
 CC The present invention describes a synthetic peptide comprising an amino  
 CC acid sequence containing a T-cell epitope of an HIV gag protein linked at  
 CC its C terminus to an amino acid sequence containing a B-cell epitope of  
 CC an HIV gp120 protein and containing the amino acid sequence: X1KDMX2;  
 CC where X1 = E, A, G or Q, and X2 = A or T, or an amino acid sequence  
 CC capable of eliciting an HIV-specific antiserum and recognizing the  
 CC sequence X1KDMX2. The synthetic peptide is useful in vaccines against  
 CC HIV infection and in diagnostic applications. AAW9892 to AAW98906, and  
 CC AAW9899 to AAW9989 represent synthetic peptides from the present  
 CC invention  
 CC  
 XX  
 SQ Sequence 20 AA;  
 Query Match 74.4%; Score 29; DB 2; Length 20;  
 Best Local Similarity 85.7%; Pred. No. 31;  
 Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Oy 1 RAFYITG 7  
 ||| |||  
 14 RAFYITG 20  
 Db

## RESULT 210

AA39699

ID AAY39699 standard; peptide; 20 AA.

XX AAY39699;

AC AAY39699;

DT 17-OCT-2003 (revised)

DT 26-NOV-1999 (first entry)

DE HIV1 chimeric peptide IAI.

XX HIV, vaccine; immunogenic composition; T cell epitope; B cell epitope;

KM infection; antibody; antiviral.

XX Human immunodeficiency virus 1.

OS US951986-A.

XX US951986-A.

PN 14-SEP-1999.

XX 14-SEP-1999.

PF 06-JUN-1995; 95US-00467881.

XX 06-JUN-1995; 95US-00467881.

PR 09-JUN-1993; 93US-00073378.

XX 09-JUN-1993; 93US-00073378.

PR 09-JUN-1994; 94US-00257528.

XX 09-JUN-1994; 94US-00257528.

PA (CONN-) CONNAUGHT LAB LTD.

XX (CONN-) CONNAUGHT LAB LTD.

PI Klein MH, Chong P, Sia CDY;

XX Klein MH, Chong P, Sia CDY;

DR WPI, 1999-550482/46.

XX WPI, 1999-550482/46.

PT Immunogenic composition containing synthetic fusion polypeptides

XX containing both the T and B cell epitopes of the human immunodeficiency

PT virus, useful antigens in producing vaccines.

XX virus, useful antigens in producing vaccines.

XX Disclosure; Col 9; 43pp; English.

PS Disclosure; Col 9; 43pp; English.

XX This sequence represents a fragment of a HIV1 protein, and can be used in

XX the immunogenic composition of the invention. The composition comprises a

CC synthetic fusion polypeptide which includes a sequence encoding 1 or more

CC T cell epitopes and a sequence encoding 1 or more B cell epitopes and a

CC carrier. Both the T cell and B cell epitopes are derived from HIV

CC proteins. The compositions are useful as vaccines against HIV infection.

CC The composition induces HIV-1-specific polyclonal antibodies that are

CC opsonising and antiviral. The peptide components may be selected to

CC induce a response against different viral isolates and in subjects who

CC recognise different T cell epitopes. (Updated on 17-OCT-2003 to

CC standardise OS field)

CC standardise OS field)

SQ Sequence 20 AA;

XX Sequence 20 AA;

Query Match 74.4%; Score 29; DB 2; Length 20;

Best Local Similarity 85.7%; Pred. No. 31;

Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFVTTIG 7

XX 1 RAFVTTIG 7

DB 14 RAFVTTIG 20

XX 14 RAFVTTIG 20

## RESULT 211

AA68800

ID AAR68800 standard; peptide; 9 AA.

XX AAR68800;

AC AAR68800;

DT 25-MAR-2003 (revised)

DT 23-AUG-1995 (first entry)

XX 23-AUG-1995 (first entry)

XX Cytotoxic T lymphocyte epitope 57 derived from env gp120 protein.

DE Cytotoxic T lymphocyte epitope 57 derived from env gp120 protein.

XX Cytotoxic T lymphocyte epitope 57 derived from env gp120 protein.

XX Cytotoxic T lymphocyte epitope 57 derived from env gp120 protein.

KM cytotoxic T lymphocyte; epitope; antigen; pathogenic; nef; gag; pol; env;

KM gp120; gp41; HIV; cell-mediated immunity; human immunodeficiency virus;

KM class II restricted.

XX Human immunodeficiency virus.

OS MO9428871-A1.

XX MO9428871-A1.

PN 22-DEC-1994.

XX 22-DEC-1994.

PF 07-JUN-1994; 94MO-US006394.

XX 07-JUN-1994; 94MO-US006394.

PR 07-JUN-1993; 93US-00072718.

XX 07-JUN-1993; 93US-00072718.

PA (ENDO-) ENDOCON INC.

XX (ENDO-) ENDOCON INC.

PI Leonard RJ;

XX Leonard RJ;

DR WPI, 1995-036067/05.

XX WPI, 1995-036067/05.

PT Implant for sustained release of pathogen-associated antigen - forming

PT chronic inflammatory site producing cytotoxic T-lymphocytes lysing

PT infected cells, esp. for treating AIDS.

XX infected cells, esp. for treating AIDS.

PS Disclosure; Page 12; 35pp; English.

XX Disclosure; Page 12; 35pp; English.

CC AAR68744-805 are cytotoxic T lymphocyte (CTL) class I and II restricted

CC epitopes derived from human immunodeficiency virus proteins. AAR68800

CC corresponds to amino acid residues 312-318 of the env gp120 protein.

CC These antigens are examples of peptides that can be used with an

CC immunogenic implant. The implant is associated with an antigen associated

CC with a pathogen and used to form a discrete, localized chronic

CC inflammation site which acts as a local 'factory' for prodn. of CTL's

CC which lyse cells infected with a specific pathogen. The expanded set of

CC pathogen-specific CTL's can eradicate or prevent development of

CC infection, and can also be used to treat or arrest the development of

CC cancers associated with infection. (Updated on 25-MAR-2003 to correct PN

CC field.)

SQ Sequence 9 AA;

XX Sequence 9 AA;

Query Match 71.8%; Score 28; DB 2; Length 9;

Best Local Similarity 100.0%; Pred. No. 1.8e+06;

Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTI 6

XX 1 RAFVTI 6

DB 4 RAFVTI 9

XX 4 RAFVTI 9

## RESULT 212

AAV10165

ID AAV10165 standard; peptide; 9 AA.

XX AAV10165;

AC AAV10165;

DT 12-MAY-1999 (first entry)

XX 12-MAY-1999 (first entry)

DE T cell epitope/MHC ligand SEQ ID NO:95.

XX T cell epitope/MHC ligand SEQ ID NO:95.

KM Cytotoxic T-lymphocyte response; CTL; antigen; lymphatic system;

KM immunisation; tumour; infectious disease; immunotherapy; cancer;

KM malignant melanoma; viral disease; hepatitis; AIDS.

XX malignant melanoma; viral disease; hepatitis; AIDS.

OS Synthetic.

XX Synthetic.

OS Human immunodeficiency virus 1.

XX Human immunodeficiency virus 1.

PN WO9902183-A2.

XX WO9902183-A2.

PD 21-JAN-1999.

XX 21-JAN-1999.

PF 10-JUL-1998; 98MO-US014289.

XX 10-JUL-1998; 98MO-US014289.

PR 10-JUL-1997; 97CA-02209815.  
PR 10-DEC-1997; 97US-00988320.  
XX  
XX (CTL1-) CTL IMMUNOTHERAPIES CORP.  
XX  
XX Kuendlig TM, Simard JTL;  
XX  
XX WPI, 1999-120514/10.  
XX  
XX Inducing a cytotoxic T lymphocyte response - by maintaining a level of  
PT antigen in the lymphatic system of a mammal so as to provide a sustained  
PT CTL response, used to treat, e.g. AIDS.  
XX  
XX  
PS Disclosure; Page 27, 199pp; English.  
XX  
XX The present invention describes a method of inducing and/or sustaining an  
CC immunological cytotoxic T lymphocyte (CTL) response in a mammal. The  
CC method comprises: (a) delivering an antigen to the mammal at a level to  
CC induce an immunological CTL response in the mammal; and (b) maintaining  
CC the level of the antigen in the mammal's lymphatic system to maintain the  
CC immunologic CTL response. The method can be used for the delivery of e.g.  
CC a differentiation antigen, a tumour-specific multilineage antigen, an  
CC embryonic antigen, an oncogene antigen, a mutated tumour-suppressor gene  
CC antigen, or a viral antigen. They can be used for the treatment of  
CC disease such as cancer, e.g. malignant melanoma or infectious disease.  
CC e.g. viral disease such as hepatitis or AIDS. Sustained antigen delivery  
CC to the lymphatic system provides for potent CTL stimulation that takes  
CC place in the milieu of the lymphoid organ, and it sustains stimulation  
CC that is necessary to keep CTL active, cytotoxic and recirculating through  
CC the body. AA10071 to AA10639 represent examples of peptide antigens  
CC given in the present invention  
XX  
XX  
SQ Sequence 9 AA;  
  
Query Match 71.8%; Score 28; DB 2; Length 9;  
Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 RAFVTI 6  
Db |||||  
4 RAFVTI 9  
  
RESULT 213  
ABG79847  
ID ABG79847 standard; peptide; 9 AA.  
XX  
XX ABG79847;  
XX  
XX  
DT 15-NOV-2002 (first entry)  
XX  
XX MHC class I molecule, viral epitope #95.  
XX  
XX Major histocompatibility complex; MHC; MHC class I molecule; virus;  
KM epitope; cytotoxic T lymphocyte response; CTL response; lymphatic system;  
KM antigen; immunogenic; malignant tumour; carcinoma; melanoma; leukaemia;  
KM lymphoma; infectious disease; hepatitis; malaria; measles; tuberculosis;  
KM acquired immune deficiency syndrome; AIDS.  
XX  
XX  
XX Human immunodeficiency virus.  
XX  
XX WO200262368-A2.  
XX  
XX 15-AUG-2002.  
XX  
XX 22-JAN-2002; 2002WO-US002033.  
XX  
XX 02-FEB-2001; 2001US-00776232.  
XX  
XX (CTL1-) CTL IMMUNOTHERAPIES CORP.  
XX  
XX Kuendlig TM, Simard JTL;  
XX

DR WPI, 2002-657506/70.  
XX  
XX Inducing or sustaining immunological cytotoxic T lymphocyte response in a  
PT mammal, useful for treating a mammal with malignant tumor or infectious  
PT disease, by directly administering an antigen to the lymphatic system of  
PT the mammal.  
XX  
XX  
XX Disclosure; Page 20; 73pp; English.  
XX  
XX The invention relates to a method of inducing and/or sustaining an  
CC immunological cytotoxic T lymphocyte (CTL) response in a mammal  
CC comprising administering directly to the lymphatic system of the mammal:  
CC (a) an antigen in the form of a polypeptide; (b) a vector comprising a  
CC nucleic acid encoding the antigen; or (c) a non-peptide antigen. The  
CC method is useful for inducing and/or sustaining CTL response in a mammal.  
CC This is particularly useful for treating a mammal having a malignant  
CC tumour (e.g. carcinoma, melanoma, leukaemia or lymphoma) or infectious  
CC disease (e.g. hepatitis, acquired immune deficiency syndrome (AIDS),  
CC malaria, measles or tuberculosis), or in an animal having a  
CC predisposition to these diseases. The mammal may be dogs, cats, mice,  
CC cattle, sheep, pigs, goats, rabbits, or preferably humans. ABG79753-  
CC ABG80319 represent viral epitopes on major histocompatibility complex  
CC (MHC) class I molecules, used in the method of the invention  
XX  
XX  
SQ Sequence 9 AA;  
  
Query Match 71.8%; Score 28; DB 5; Length 9;  
Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 RAFVTI 6  
Db |||||  
4 RAFVTI 9  
  
RESULT 214  
ABR55441  
ID ABR55441 standard; peptide; 9 AA.  
XX  
XX ABR55441;  
XX  
XX  
DT 29-JUL-2003 (first entry)  
XX  
XX Peptide derived from HIV gp120 V3 loop.  
XX  
XX Antigen; Bob; gp120; lymphocyte; HIV enteropathy; HIV nephropathy;  
KM HIV-related hyperlipidemia; HIV-related infertility.  
XX  
XX Human immunodeficiency virus.  
XX  
XX WO2003037251-A2.  
XX  
XX 08-MAY-2003.  
XX  
XX 25-OCT-2002; 2002WO-US034336.  
XX  
XX 29-OCT-2001; 2001US-0341045P.  
XX  
XX (UTAH ) UNIV UTAH RES FOUND.  
XX  
XX Clayton F, Fantini J;  
XX  
XX WPI, 2003-430463/40.  
XX  
XX Novel composition for reducing interactions between Bob and gp120 and for  
PT reducing symptoms of HIV enteropathy, HIV nephropathy or HIV-related  
PT infertility, comprises a Bob inhibitor that binds a region of Bob.  
XX  
XX  
XX Claim 69; Page 136; 159pp; English.  
XX  
XX The specification describes a composition for reducing an interaction  
CC between Bob and gp120. The composition comprises a Bob inhibitor that  
CC binds a region of Bob, or a substance that interacts with N-terminal

CC, sequence of the first loop or the first extracellular loop domains of Bob  
CC (the substance binds Bob preferentially over galactosyl ceramide). The  
CC composition is useful for reducing an interaction between Bob and gp120,  
CC reducing activation of lymphocytes by gp120, reducing the symptoms of HIV  
CC enteropathy, HIV nephropathy, HIV-related hyperlipidemia, or HIV-related  
CC infertility. The present sequence is derived from a gp120 protein V3 loop  
XX  
SQ Sequence 9 AA:  
Query Match 71.8%; Score 28; DB 6; Length 9;  
Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 RAFTI 6  
Db 4 RAFTI 9  
RESULT 215  
ADK68776  
ID ADK68776 standard; peptide: 9 AA.  
XX  
AC ADK68776;  
XX  
DT 06-MAY-2004 (first entry)  
XX  
DE Epitope liberation-related peptide SeqID139.  
XX  
KM epitope liberation; substrate; proteasome; cytostatic; antibacterial;  
KM protozoacide; fungicide; T-cell activator; vaccine; housekeeping epitope;  
KM cytotoxic T lymphocyte; CTL; adoptive immunotherapy; neoplastic cell;  
KM virus; bacterium; protozoan; fungus; housekeeping proteasome system.  
XX  
OS Human immunodeficiency virus.  
XX  
PN US2003228634-A1.  
XX  
PD 11-DEC-2003.  
XX  
PF 07-NOV-2002; 2002US-00292413.  
XX  
PR 07-NOV-2001; 2001US-0336968P.  
XX  
PA (SIMA/) SIMARD J J L.  
PA (DIAM/) DIAMOND D C.  
PA (QIUZ/) QIU Z.  
PA (LEIX/) LEI X.  
PI Simard JTL, Diamond DC, Qiu Z, Lei X;  
XX  
DR WPI; 2004-167209/16.  
XX  
PT Identifying polypeptide suitable for epitope e.g., housekeeping epitope,  
PT liberation by contacting substrate polypeptide comprising epitope of  
PT interest, with proteasome, and assaying for liberation of epitope.  
XX  
PS Disclosure; SEQ ID NO 139; 67bp; English.  
XX  
XX This invention relates to a novel method of identifying a polypeptide  
CC suitable for epitope liberation, including the steps of identifying an  
CC epitope of interest; providing substrate polypeptide sequence including  
CC the epitope, wherein the substrate permits processing by a proteasome;  
CC contacting the substrate with a composition including the proteasome,  
CC under conditions that support processing of the substrate by proteasome;  
CC and assaying for liberation of epitope. The invention may be useful for  
CC the development of compounds with a cytostatic, antibacterial,  
CC protozoacide or fungicide activity acting as T-cell activators. In  
CC addition, the invention may allow development of a vaccine. The invention  
CC is useful for identifying a polypeptide suitable for epitope liberation,  
CC where the epitope is a housekeeping epitope. The compositions comprising  
CC the identified housekeeping epitopes are useful in vitro in vaccine  
CC development or in the generation or expansion of cytotoxic T lymphocyte  
CC (CTL) to be used in adoptive immunotherapy. The invention is also useful

CC for activating T-cells against neoplastic cells, and cells infected with  
CC virus, bacterium, protozoan or fungus. CTL epitopes are identified based  
CC on the knowledge that such epitopes are, in fact, produced by the  
CC housekeeping proteasome system. Once identified, these epitopes, embodied  
CC as peptides, can be used to successfully immunise or induce therapeutic  
CC CTL responses against housekeeping proteasome expressing target cells in  
CC the host. The present sequence is that of a peptide which is related to  
CC the method of the invention.  
XX  
SQ Sequence 9 AA:  
Query Match 71.8%; Score 28; DB 8; Length 9;  
Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 RAFTI 6  
Db 4 RAFTI 9  
RESULT 216  
ADQ10574  
ID ADQ10574 standard; peptide: 9 AA.  
XX  
AC ADQ10574;  
XX  
DT 23-SEP-2004 (first entry)  
XX  
DE Human immunodeficiency virus T-cell epitope seqid 139.  
XX  
KM immunostimulant; cytostatic; vaccine; tumour-associated antigen SSX-2;  
KM SSX-2 antigen; epitope cluster; MHC receptor peptide binding cleft;  
KM immunogenic composition; immune response; cancer vaccine vector;  
KM epitope liberation; human leukocyte antigen; HLA A2-specific CTL;  
KM cytotoxic T lymphocyte; T-cell epitope.  
XX  
OS Human immunodeficiency virus.  
XX  
PN US2004132088-A1.  
XX  
PD 08-JUL-2004.  
XX  
PF 10-FEB-2004; 2004US-00777053.  
XX  
PR 07-NOV-2001; 2001US-0336968P.  
PR 07-NOV-2002; 2002US-00292413.  
XX  
PA (SIMA/) SIMARD J J L.  
PA (DIAM/) DIAMOND D C.  
PA (QIUZ/) QIU Z.  
PA (LEIX/) LEI X.  
PI Simard JTL, Diamond DC, Qiu Z, Lei X;  
XX  
DR WPI; 2004-517003/49.  
XX  
PT Novel nucleic acid encoding tumor-associated antigen SSX-2, useful in  
PT inducing an immune response and in treating cancer.  
XX  
PS Disclosure; SEQ ID NO 139; 260bp; English.  
XX  
XX The invention describes an isolated nucleic acid (I) comprising a reading  
CC frame comprising a first sequence, where the first sequence encodes one  
CC or more segments of tumour-associated antigen SSX-2, which comprises a  
CC sequence of 188 amino acids (SEQ ID NO: 40), where the first sequence  
CC does not encode the complete SSX-2 antigen, and where each segment  
CC comprises an epitope cluster, the cluster comprising or encoding at least  
CC two amino acid sequences having a known or predicted affinity for a same  
CC MHC receptor peptide binding cleft. Also described are: an isolated  
CC polypeptide comprising the amino acid sequence encoded in the reading  
CC frame; and an immunogenic composition comprising (I) or the polypeptide  
CC of (I). (I) is a nucleic acid encoding a tumour-associated antigen SSX-2  
CC comprising a fully defined sequence of 188 amino acids (SEQ ID NO: 40).

CC The nucleic acid, the encoded antigen, and composition are useful in  
CC inducing an immune response and in treating cancer. Expression cassettes  
CC are used in vaccine vectors. This is the amino acid sequence of a T-cell  
CC epitope MHC ligand associated with methods, therapies and compositions  
CC described in the invention.

XX Sequence 9 AA;

Query Match 71.8%; Score 28; DB 8; Length 9;  
Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTI 6  
| | | | |  
Db 4 RAFTI 9

RESULT 217  
AAR3452  
ID AAR3452 standard; peptide; 10 AA.

XX AAR3452;  
AC  
XX 27-AUG-2003 (revised)  
DT 25-MAR-2003 (revised)  
DT 17-DEC-2001 (revised)  
DT 03-JUL-1993 (first entry)

DE Sequence of synthetic peptide which represents immunogenic region of the  
DE V loop of HIV isolate IIb.

XX Cytotoxic T lymphocyte; immunogenic peptide; V3 loop; treatment;  
XX glycoprotein 160.

XX Human immunodeficiency virus 1.

XX USN7847311-N.

XX 01-JAN-1993.

XX 06-MAR-1992; 92US-00847311.

XX 26-JAN-1988; 88US-00148692.  
PR 18-SEP-1991; 91US-00760530.

XX (USSH ) US DEPT HEALTH & HUMAN SERVICE.

XX Berzofsky JA, Taskeshita T, Shitai M, Pendleton CD, Kozlowski S;  
PT WPI; 1993-093577/11.

XX Peptide(s) for stimulation of cytotoxic T cells specific for HIV-1 -  
PT which correspond to residues 318-327 of HIV-1 gp 160 envelope  
PT glycoprotein.

XX Disclosure; Page 8; 61pp; English.

XX The peptide elicits cytotoxic T lymphocyte (CTL) response at concs. of  
CC 10(-12) to 10(-6) M. It corresp. to residues 318-327 of HIV-1 strain IIb  
CC gp. 160 envelope glycoprotein. It can be used for the treatment and/or  
CC prophylaxis of HIV infection. (Note: Revised entry submitted to correct  
CC the patent number format of US Government-owned NTIS applications to  
CC prevent clashes with ongoing US granted patent numbers. For further  
CC information please visit the Derwent web site at  
CC www.derwent.com/dwpi/updates/ntis-us.html.) (updated on 25-MAR-2003 to  
CC correct PF field.) (updated on 27-AUG-2003 to correct OS field.)

XX Sequence 10 AA;

Query Match 71.8%; Score 28; DB 2; Length 10;  
Best Local Similarity 100.0%; Pred. No. 25;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTI 6  
| | | | |  
Db 5 RAFTI 10

RESULT 218  
AAV10172  
ID AAV10172 standard; peptide; 10 AA.

XX AAV10172;

XX 12-MAY-1999 (first entry)

DE T cell epitope/MHC ligand SEQ ID NO:102.

XX Cytotoxic T-lymphocyte response; CTL; antigen; lymphatic system;  
XX immunisation; tumour; infectious disease; immunotherapy; cancer;  
XX malignant melanoma; viral disease; hepatitis; AIDS.

XX Synthetic.  
OS Human immunodeficiency virus 1.

XX WO9902183-A2.

XX 21-JAN-1999.

XX 10-JUL-1998; 98WO-US014289.

XX 10-JUL-1997; 97CA-02209815.  
PR 10-DEC-1997; 97US-00988320.

XX (CTL1-) CTL IMMUNOTHERAPIES CORP.

XX Kuendig TM, Simard JLL;

XX WPI; 1999-120514/10.

XX Inducing a cytotoxic T lymphocyte response - by maintaining a level of  
XX antigen in the lymphatic system of a mammal so as to provide a sustained  
XX CTL response, used to treat, e.g. AIDS.

XX Disclosure; Page 27; 19pp; English.

XX The present invention describes a method of inducing and/or sustaining an  
CC immunological cytotoxic T lymphocyte (CTL) response in a mammal. The  
CC method comprises: (a) delivering an antigen to the mammal at a level to  
CC induce an immunological CTL response in the mammal; and (b) maintaining  
CC the level of the antigen in the mammal's lymphatic system to maintain the  
CC immunologic CTL response. The method can be used for the delivery of e.g.  
CC a differentiation antigen, a tumour-specific multinease antigen, an  
CC embryonic antigen, an oncogene antigen, a mutated tumour-suppressor gene  
CC antigen, or a viral antigen. They can be used for the treatment of  
CC disease such as cancer, e.g. malignant melanoma or infectious disease,  
CC e.g. viral disease such as hepatitis or AIDS. Sustained antigen delivery  
CC to the lymphatic system provides for potent CTL stimulation that takes  
CC place in the milieu of the lymphoid organ, and it sustains stimulation  
CC that is necessary to keep CTL active, cytotoxic and recirculating through  
CC the body. AAV10071 to AAV10639 represent examples of peptide antigens  
CC given in the present invention

XX Sequence 10 AA;

Query Match 71.8%; Score 28; DB 2; Length 10;  
Best Local Similarity 100.0%; Pred. No. 25;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTI 6  
| | | | |  
Db 5 RAFTI 10

RESULT 219  
AAV10547



ID AAY10547 standard; peptide; 10 AA.  
 XX  
 AC AAY10547;  
 XX  
 DT 12-MAY-1999 (first entry)  
 XX  
 DE HLA Class I motif peptide SEQ ID NO:477.  
 XX  
 KW Cytotoxic T-lymphocyte response; CTL; antigen; lymphatic system;  
 KW immunisation; tumour; infectious disease; immunotherapy; cancer;  
 KW malignant melanoma; viral disease; hepatitis; AIDS.  
 XX  
 OS Synthetic.  
 OS Human immunodeficiency virus 1.  
 XX  
 PN WO9902183-A2.  
 XX  
 PD 21-JAN-1999.  
 XX  
 PF 10-JUL-1998; 98WO-US014289.  
 XX  
 PR 10-JUL-1997; 97CA-02209815.  
 PR 10-DEC-1997; 97US-00988320.  
 XX  
 PA (CTL-) CTL IMMUNOTHERAPIES CORP.  
 XX  
 PI Kuendig TM, Simard J-L;  
 PI  
 DR WPI; 1999-120514/10.  
 XX  
 PT Inducing a cytotoxic T lymphocyte response - by maintaining a level of  
 PT antigen in the lymphatic system of a mammal so as to provide a sustained  
 PT CTL response, used to treat, e.g. AIDS.  
 XX  
 PS Disclosure; Page 46; 1999p; English.  
 XX  
 CC The present invention describes a method of inducing and/or sustaining an  
 CC immunological cytotoxic T lymphocyte (CTL) response in a mammal. The  
 CC method comprises: (a) delivering an antigen to the mammal at a level to  
 CC induce an immunological CTL response in the mammal; and (b) maintaining  
 CC the level of the antigen in the mammal's lymphatic system to maintain the  
 CC immunologic CTL response. The method can be used for the delivery of e.g.  
 CC a differentiation antigen, a tumour-specific multilineage antigen, an  
 CC embryonic antigen, an oncogene antigen, a mutated tumour-suppressor gene  
 CC antigen, or a viral antigen. They can be used for the treatment of  
 CC disease such as cancer, e.g. malignant melanoma or infectious disease,  
 CC e.g. viral disease such as hepatitis or AIDS. Sustained antigen delivery  
 CC to the lymphatic system provides for potent CTL stimulation that takes  
 CC place in the milieu of the lymphoid organ, and it sustains stimulation  
 CC that is necessary to keep CTL active, cytotoxic and recirculating through  
 CC the body. AAY10071 to AAY10639 represent examples of peptide antigens  
 CC given in the present invention  
 CC  
 SQ Sequence 10 AA;  
 XX  
 QY  
 DB 1 RAFVTI 6  
 DB 5 RAFVTI 10  
 XX  
 RESULT 220  
 AAY10164  
 ID AAY10164 standard; peptide; 10 AA.  
 XX  
 AC AAY10164;  
 XX  
 DT 12-MAY-1999 (first entry)  
 XX  
 DE T cell epitope/MHC ligand SEQ ID NO:94.  
 XX

XX  
 KW Cytotoxic T-lymphocyte response; CTL; antigen; lymphatic system;  
 KW immunisation; tumour; infectious disease; immunotherapy; cancer;  
 KW malignant melanoma; viral disease; hepatitis; AIDS.  
 XX  
 OS Synthetic.  
 OS Human immunodeficiency virus 1.  
 XX  
 PN WO9902183-A2.  
 XX  
 PD 21-JAN-1999.  
 XX  
 PF 10-JUL-1998; 98WO-US014289.  
 XX  
 PR 10-JUL-1997; 97CA-02209815.  
 PR 10-DEC-1997; 97US-00988320.  
 XX  
 PA (CTL-) CTL IMMUNOTHERAPIES CORP.  
 XX  
 PI Kuendig TM, Simard J-L;  
 PI  
 DR WPI; 1999-120514/10.  
 XX  
 PT Inducing a cytotoxic T lymphocyte response - by maintaining a level of  
 PT antigen in the lymphatic system of a mammal so as to provide a sustained  
 PT CTL response, used to treat, e.g. AIDS.  
 XX  
 PS Disclosure; Page 26; 1999p; English.  
 XX  
 CC The present invention describes a method of inducing and/or sustaining an  
 CC immunological cytotoxic T lymphocyte (CTL) response in a mammal. The  
 CC method comprises: (a) delivering an antigen to the mammal at a level to  
 CC induce an immunological CTL response in the mammal; and (b) maintaining  
 CC the level of the antigen in the mammal's lymphatic system to maintain the  
 CC immunologic CTL response. The method can be used for the delivery of e.g.  
 CC a differentiation antigen, a tumour-specific multilineage antigen, an  
 CC embryonic antigen, an oncogene antigen, a mutated tumour-suppressor gene  
 CC antigen, or a viral antigen. They can be used for the treatment of  
 CC disease such as cancer, e.g. malignant melanoma or infectious disease,  
 CC e.g. viral disease such as hepatitis or AIDS. Sustained antigen delivery  
 CC to the lymphatic system provides for potent CTL stimulation that takes  
 CC place in the milieu of the lymphoid organ, and it sustains stimulation  
 CC that is necessary to keep CTL active, cytotoxic and recirculating through  
 CC the body. AAY10071 to AAY10639 represent examples of peptide antigens  
 CC given in the present invention  
 CC  
 SQ Sequence 10 AA;  
 XX  
 QY  
 DB 1 RAFVTI 6  
 DB 5 RAFVTI 10  
 XX  
 RESULT 221  
 AAY03691  
 ID AAY03691 standard; peptide; 10 AA.  
 XX  
 AC AAY03691;  
 XX  
 DT 17-OCT-2003 (revised)  
 DT 07-JUN-1999 (first entry)  
 XX  
 DE Amino acid fragment of CTL epitope of HIV/SIV (H) string.  
 XX  
 KW CD8+ T-cell; immune response; antigen; priming composition; CTL; epitope;  
 KW cytotoxic T lymphocyte; boosting; poxvirus vector; FV; pathogen; tumour;  
 KW malaria; parasite; P. falciparum; viral; bacterial; parasitic; cancer;  
 KW melanoma; HIV; breast; colon; vaccination.  
 XX

```

OS Human immunodeficiency virus 1.
XX
XX WO9856919-A2.
XX
XX 17-DEC-1998.
XX
XX
XX 09-JUN-1998; 98WO-GB001681.
XX
XX
XX 09-JUN-1997; 97GB-00011957.
XX
XX
XX (ISIS-) ISIS INNOVATION LTD.
XX
XX McMichael AJ, Hill AVS, Gilbert SC, Schneider J, Plebanski M,
XX Hanke T, Smith GL, Blanchard T;
XX WPI; 1999-070325/06.
XX
XX
XX Generating CD8-positive T cell response to target antigen using
XX recombinant poxvirus - for treating or preventing malaria and HIV
XX infection, also epitope strings from Plasmodium and HIV.
XX
XX
XX Claim 43; Page 20; 85pp; English.
XX
XX
XX The invention relates to methods and reagents for generating a protective
XX CD8+ T-cell immune response against at least one target antigen. The kits
XX of the invention comprises (i) as priming composition, a source of one or
XX more CD8+ T-cell [cytotoxic T lymphocytes-(CTL)] epitopes of the target
XX antigen, plus a carrier and (ii) as boosting composition a source of CTL
XX epitopes, with at least one CTL epitope the same as used in (i), with
XX this source being a non-replicating or replication-impaired recombinant
XX poxvirus vector (PVV) plus a carrier. If the source of CTL epitopes in
XX (i) is a viral vector, then the vector in (ii) is from a different virus.
XX The kits are used to generate an immune response (prophylactic or
XX therapeutic) against pathogens or tumours, specifically against malaria
XX parasites such as P. falciparum, or HIV, and also many other bacterial,
XX viral or parasitic pathogens. The kits are also used for protective
XX response against melanoma and cancer of breast or colon, and generally
XX wherever a strong CD8+ response is protective. The boosting composition
XX may be used alone to boost a naturally primed response against malaria.
XX The specified PVV provide an excellent booster effect, better than that
XX from wild-type poxvirus, resulting in complete rather than partial
XX protection against sporozoite challenge. Also PVV are safer to use than
XX wild-type virus. Sequences AAY03681-704 represent CTL peptide epitopes of
XX the HIV/SIV (H) epitope string. (Updated on 17-OCT-2003 to standardise OS
XX field)
XX
XX
XX Sequence 10 AA;
SQ
XX
XX
XX Query Match 71.8%; Score 28; DB 2; Length 10;
XX Best Local Similarity 100.0%; Pred. No. 25;
XX Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX
XX 1 RAFTVI 6
XX |||||
XX 5 RAFTVI 10
XX
XX
XX RESULT 222
XX AAY03655
XX ID AAY03655 standard; peptide; 10 AA.
XX
XX
XX AAY03655;
XX
XX
XX 07-JUN-1999 (first entry)
XX
XX
XX HIV gag CTL peptide epitope.
XX
XX
XX CD8+ T-cell; immune response; antigen; priming composition; CTL; epitope;
XX cytotoxic T lymphocyte; boosting; poxvirus vector; PVV; pathogen; tumour;
XX malaria; parasite; P. falciparum; viral; bacterial; parasitic; cancer;
XX melanoma; HIV; breast; colon; vaccination; P1A tumour antigen.
XX
XX
XX Synthetic.
XX

```

```

OS Human immunodeficiency virus 1.
XX
XX WO9856919-A2.
XX
XX 17-DEC-1998.
XX
XX
XX 09-JUN-1998; 98WO-GB001681.
XX
XX
XX 09-JUN-1997; 97GB-00011957.
XX
XX
XX (ISIS-) ISIS INNOVATION LTD.
XX
XX McMichael AJ, Hill AVS, Gilbert SC, Schneider J, Plebanski M,
XX Hanke T, Smith GL, Blanchard T;
XX WPI; 1999-070325/06.
XX
XX
XX Generating CD8-positive T cell response to target antigen using
XX recombinant poxvirus - for treating or preventing malaria and HIV
XX infection, also epitope strings from Plasmodium and HIV.
XX
XX
XX Example 1; Page 22; 85pp; English.
XX
XX
XX The invention relates to methods and reagents for generating a protective
XX CD8+ T-cell immune response against at least one target antigen. The kits
XX of the invention comprises (i) as priming composition, a source of one or
XX more CD8+ T-cell [cytotoxic T lymphocytes-(CTL)] epitopes of the target
XX antigen, plus a carrier and (ii) as boosting composition a source of CTL
XX epitopes, with at least one CTL epitope the same as used in (i), with
XX this source being a non-replicating or replication-impaired recombinant
XX poxvirus vector (PVV) plus a carrier. If the source of CTL epitopes in
XX (i) is a viral vector, then the vector in (ii) is from a different virus.
XX The kits are used to generate an immune response (prophylactic or
XX therapeutic) against pathogens or tumours, specifically against malaria
XX parasites such as P. falciparum, or HIV, and also many other bacterial,
XX viral or parasitic pathogens. The kits are also used for protective
XX response against melanoma and cancer of breast or colon, and generally
XX wherever a strong CD8+ response is protective. The boosting composition
XX may be used alone to boost a naturally primed response against malaria.
XX The specified PVV provide an excellent booster effect, better than that
XX from wild-type poxvirus, resulting in complete rather than partial
XX protection against sporozoite challenge. Also PVV are safer to use than
XX wild-type virus. Sequences AAY03653-60 represent CTL peptide epitopes
XX used during the course of the invention
XX
XX
XX Sequence 10 AA;
SQ
XX
XX
XX Query Match 71.8%; Score 28; DB 2; Length 10;
XX Best Local Similarity 100.0%; Pred. No. 25;
XX Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX
XX 1 RAFTVI 6
XX |||||
XX 5 RAFTVI 10
XX
XX
XX RESULT 223
XX AAY05357
XX ID AAY05357 standard; peptide; 10 AA.
XX
XX
XX AAY05357;
XX
XX
XX 17-OCT-2003 (revised)
XX
XX
XX 29-JUN-1999 (first entry)
XX
XX
XX HIV-1 C1UVAAC peptide, SEQ ID NO. 16.
XX
XX
XX HIV-1; C1UVAAC; cluster peptide vaccine construct; cytotoxic T lymphocyte;
XX protective mucosal CTL response; hepatitis A virus; papilloma virus;
XX feline immunodeficiency virus; feline leukaemia virus; M. tuberculosis;
XX listeria monocytogenes; M. leprae; Giardia lamblia;
XX immune response induction.
XX

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OS Human immunodeficiency virus 1.
XX
XX W09912563-A2.
XX
XX 18-MAR-1999.
XX
XX
XX 11-SEP-1998; 98WO-US019028.
XX
XX 11-SEP-1997; 97US-0058523P.
XX
XX 17-FEB-1998; 98US-0074894P.
XX
XX (USSH ) US DEPT HEALTH & HUMAN SERVICE.
XX
XX Berzofsky JA, Belyakov IM, Derby MA, Kelsall BL, Strober W;
XX
XX WPI; 1999-243663/20.
XX
XX Method for inducing a protective mucosal cytotoxic T lymphocyte immune
XX
XX response.
XX
XX Example 3; Page 85; 86pp; English.
XX
XX This sequence represents a HIV-1 cluster peptide vaccine conjugate
XX
XX (CIUVAC) sequence. The invention relates to a method for inducing a
XX
XX protective mucosal cytotoxic T lymphocyte (CTL) response in a mammalian
XX
XX subject, which comprises contacting a mucosal tissue of the subject with
XX
XX a composition comprising a purified soluble antigen. The method can be
XX
XX used for protection against e.g. hepatitis A virus, papilloma virus,
XX
XX feline immunodeficiency virus, feline leukaemia virus, listeria
XX
XX monocytogenes, M. tuberculosis, M. leprae, or Giardia lamblia. The method
XX
XX induces long-lasting protective mucosal immune responses. (Updated on 17-
XX
XX OCT-2003 to standardise OS field)
XX
XX
XX Sequence 10 AA:
SQ
Query Match 71.8%; Score 28; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 25;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 RAFVTI 6
Db 5 RAFVTI 10

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PI Kaneko Y, Kozbor D;
XX
XX WPI; 2000-099746/09.
XX
XX New composition for inducing viral immunity, useful for production of HIV
XX
XX vaccines.
XX
XX Example 3; Page 11; 28pp; English.
XX
XX This sequence represents a fragment of the HIV-1 env protein. The
XX
XX invention relates to a therapeutic composition for inducing cellular
XX
XX immunity against a virus, which comprises a nucleic acid encoding an
XX
XX envelope glycoprotein of the virus which: (a) contains a modified
XX
XX immunodominant epitope; and (b) induces cellular immunity to a conserved
XX
XX epitope of the envelope glycoprotein. The nucleic acid may be introduced
XX
XX into a vector DNA or a liposome and mixed with an adjuvant to prepare a
XX
XX vaccine effective against and induce cellular immunity against the HIV
XX
XX virus. The therapeutic composition can be used to prevent or treat
XX
XX infection. Prior art methods of immunising patients against viruses which
XX
XX frequently mutate have resulted in chronic immune activation and high T
XX
XX cell turnover because of secondary responses induced by the V3 loop
XX
XX mutated epitopes. The full length envelope glycoprotein expressed on the
XX
XX cell surface or released from HIV infected cells can also trigger
XX
XX detrimental effects which are essential in AIDS pathogenesis. The
XX
XX composition provides antigen presenting cells (APCs) which contain the
XX
XX modified envelope glycoprotein and are resistant to antibody-dependent
XX
XX cell mediated cytotoxicity (ADCC), do not form syncytia, do not undergo
XX
XX apoptosis and induce cellular immunity to the virus without inducing
XX
XX apoptosis of CD4+ T cells. The composition therefore redirects immune
XX
XX responses towards the conserved epitope of the envelope glycoprotein,
XX
XX inducing cellular immunity to multiple strains of the virus. (Updated on
XX
XX 12-SEP-2003 to standardise OS field)
XX
XX
XX Sequence 10 AA:
SQ
Query Match 71.8%; Score 28; DB 3; Length 10;
Best Local Similarity 100.0%; Pred. No. 25;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 RAFVTI 6
Db 5 RAFVTI 10

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RESULT 224
AAV59593
ID AAV59593 standard; peptide; 10 AA.
XX
XX AAV59593;
AC
XX
XX 12-SEP-2003 (revised)
DT
XX
XX 05-APR-2000 (first entry)
DE
XX
XX HIV-1 env peptide I-10.
XX
XX HIV-1; env gene; cellular immunity; virus; therapy;
XX
XX envelope glycoprotein; infection; immunisation; immune response.
XX
XX Human immunodeficiency virus 1.
XX
XX EP972523-A2.
XX
XX 19-JAN-2000.
XX
XX 27-MAY-1999; 99BP-00401265.
XX
XX 29-MAY-1998; 98US-00087513.
XX
XX (NIH-) JAPAN HEALTH SCI FOUND.
XX
XX (AJIN ) AJINOMOTO CO INC.
XX
XX (UYJE-) UNIV JEFFERSON THOMAS.
XX

```

```

RESULT 225
AAV67361
ID AAV67361 standard; peptide; 10 AA.
XX
XX AAV67361;
AC
XX
XX 25-APR-2000 (first entry)
DT
XX
XX Human immunodeficiency virus-10 (HIV-10) peptide.
XX
XX Therapeutic antigen; cytotoxic T lymphocyte; CTL; CTL immune response;
XX
XX cellular immune response induction method; vaccine; human; tumour;
XX
XX melanoma glycoprotein 75.
XX
XX Human immunodeficiency virus.
XX
XX W09963945-A2.
XX
XX 16-DEC-1999.
XX
XX 11-JUN-1999; 99WO-US013146.
XX
XX 12-JUN-1998; 98US-0089055P.
XX
XX 30-OCT-1998; 98US-0106339P.
XX
XX (SLOK ) SLOAN KETTERING INST CANCER RES.
XX
XX Nikolai-Zugic J, Dyall R, Houghton AN;
XX

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DR WPI; 2000-126432/11.

XX Induction of a cellular immune response to a weakly immunogenic protein,  
 PT used to target and kill tumor cells.  
 XX  
 XX Example 2; Page 15; 44pp; English.

CC This sequence represents a human immunodeficiency virus (HIV-10) peptide  
 CC used in the method of the invention. The invention relates to a method  
 CC for inducing a cytotoxic T lymphocyte (CTL) immune response to non/weakly  
 CC immunogenic proteins which are expressed on tumour cells. The method for  
 CC inducing a cellular immune response to a non-immunogenic or weakly  
 CC immunogenic target peptide expressed on tumour cells of a mammalian  
 CC subject comprises administering antigen to induce a cellular immune  
 CC response to the target peptide. The antigen comprises an immunogenic  
 CC portion having a major histocompatibility complex (MHC) binding domain  
 CC which binds to the MHC and an immune recognition domain which is  
 CC recognized by T-cells. The antigen is derived from the target peptide  
 CC such that the MHC-binding portion binds to MHC with a greater affinity  
 CC than the target peptide without material alteration of the immune  
 CC recognition portion. The methods are used for inducing a cellular immune  
 CC response to a non-immunogenic or weakly immunogenic target peptide  
 CC expressed on tumour cells of a mammalian subject. The antigens and  
 CC immunogens of the invention, as well as polynucleotides encoding them,  
 CC are used in vaccine compositions against tumour cells

CC Sequence 10 AA;

Query Match 71.8%; Score 28; DB 3; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 25;  
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTVI 6  
 |||||  
 DB 5 RAFTVI 10

RESULT 226  
 AAY94398  
 ID AAY94398 standard; peptide; 10 AA.  
 XX  
 AC AAY94398;  
 XX  
 DT 21-SEP-2000 (first entry)  
 XX  
 DE HIV peptide used to generate a mouse hybridoma.  
 XX  
 DE Human; phage display; anti-inflammatory; antibody therapy;  
 KW inflammatory bowel disease; rheumatoid arthritis; septic shock;  
 KW multiple sclerosis; chronic inflammation; allograft rejection; panning;  
 KW tumour necrosis factor alpha; TNF; CDR3;  
 KW complementarity determining region; hybridoma.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200029004-A1.  
 XX  
 PD 25-MAY-2000.  
 XX  
 PF 02-NOV-1999; 99WO-IL000581.  
 XX  
 PR 18-NOV-1998; 98IL-00127127.  
 XX  
 PA (PEPT-) PEPTOR LTD.  
 XX  
 PI Plaksin D;  
 XX  
 PS WPI; 2000-387610/33.  
 XX  
 PT Small functional units of antibody heavy chain variable regions useful  
 PT for diagnosis and treatment of disease.  
 XX  
 PS Example 1; Page 18; 48pp; English.

XX The present sequence is an HIV peptide. A gene encoding a single-domain  
 CC VH protein belonging to mouse VH group I(A) was cloned from a mouse  
 CC hybridoma generated against the present sequence in complex with H-2nd.  
 CC The gene was amplified by PCR. The 3' primer contained a sequence which  
 CC randomised 9 amino acids in the third hypervariable loop (CDR3) of the VH  
 CC and therefore generated the single-domain VH library repertoire. CDR3  
 CC typically makes most antigen contacts in antibody combining sites. The  
 CC PCR product was reamplified to avoid non-symmetric pairing of strands due  
 CC to primer exhaustion. The final product was ligated into the phagemid  
 CC vector pCANTAB 5 R and electroporated into E. coli strain TGI. Phage  
 CC clones capable of binding a specific antigen, e.g. Tumour necrosis factor  
 CC alpha (TNFalpha), can be selected by library panning. Single-domain VH  
 CC proteins can be used to treat or diagnose associated disorders. For  
 CC example, disorders in which TNF plays a role include inflammatory bowel  
 CC disease, rheumatoid arthritis, septic shock, multiple sclerosis, chronic  
 CC inflammation and allograft rejection

CC Sequence 10 AA;

Query Match 71.8%; Score 28; DB 3; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 25;  
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTVI 6  
 |||||  
 DB 5 RAFTVI 10

RESULT 227  
 AAY94588  
 ID AAY94588 standard; peptide; 10 AA.  
 XX  
 AC AAY94588;  
 XX  
 DT 12-SEP-2003 (revised)  
 DT 10-JAN-2001 (first entry)  
 XX  
 DE Mouse H2-d-class I restricted minimal cytolytic T lymphocyte epitope.  
 XX  
 DE Hepatitis B virus nucleocapsid antigen; HBcAg; T cell epitope;  
 KW cytolytic T lymphocyte; immunogenic; ICE; CTL; HIV;  
 KW immunodominant core epitope; immunisation; mouse.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 EN WO200026385-A1.  
 XX  
 PD 11-MAY-2000.  
 XX  
 PF 05-NOV-1999; 99WO-US026291.  
 XX  
 PR 05-NOV-1998; 98US-0107169P.  
 XX  
 PA (POMD-) POWDERJECT VACCINES INC.  
 XX  
 PI Fuller DL, Fuller JT;  
 XX  
 PS WPI; 2000-451623/39.  
 XX  
 PT Use of expression vector for nucleic acid immunization that comprises  
 PT promoter and recombinant nucleic acid sequences encoding Hepatitis B core  
 PT antigen and T cell epitope from antigen.  
 XX  
 PS Example 7; Page 41; 55pp; English.

CC The present invention relates to an immunogenic recombinant nucleic acid  
 CC molecule. The molecule consists of a modified hepatitis B virus  
 CC nucleocapsid antigen (HBcAg) with a T cell epitope sequence inserted  
 CC within the HBcAg. The creation of a unique restriction site in HBcAg  
 CC facilitated the insertion of the T cell epitope into the DNA encoding the  
 CC immunodominant core epitope of the HBcAg. An example of a suitable  
 CC insertion epitope is the present sequence, the mouse H2-d-restricted

CC minimal cytolytic T lymphocyte epitope of HIV IAI gp 120. Alternatively  
 CC other T cell epitopes may be inserted (AA94583, AA94584, AA94585,  
 CC AA94586, AA94587). The recombinant nucleic acid molecule may then be  
 CC used as a reagent in various nucleic acid immunisation strategies. The  
 CC advantage of this method of immunisation is that the nucleic acid  
 CC reagents that encode hybrid HBcAg generate an extremely high frequency  
 CC cellular immune response against the CTL epitope. (Updated on 12-SEP-2003  
 CC to standardise OS field)

XX  
 SQ Sequence 10 AA;

QY 1 RAFTI 6  
 |||||  
 5 RAFTI 10

Db

Query Match 71.8%; Score 28; DB 3; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 25;  
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 228  
 AAB15874  
 ID AAB15874 standard; peptide; 10 AA.  
 XX  
 AC AAB15874;  
 XX  
 DT 17-JAN-2001 (first entry)  
 XX  
 DE Human chemokine derived peptide #26.  
 XX  
 KW Macrophage recruitment; chemokine derivative; MCP-1; osteoporosis;  
 KW monocyte chemoattractant protein-1; inflammation; atherosclerosis; HIV;  
 KW AIDS; stroke; psoriasis; autoimmune disease; hypertension; endotoxaemia;  
 KW basophil-mediated disease; myocardial infarction; acute ischaemia;  
 KW rheumatoid arthritis; contraception.  
 XX  
 OS Synthetic.  
 XX  
 PN WO200042071-A2.  
 XX  
 PD 20-JUL-2000.  
 XX  
 PF 12-JAN-2000; 2000WO-US000821.  
 XX  
 PR 12-JAN-1999; 99US-00229071.  
 PR 17-MAR-1999; 99US-00271192.  
 PR 01-DEC-1999; 99US-00452406.  
 XX  
 PA (NEOR-) NEORX CORP.  
 XX  
 PI Grainger DJ, Tatalick LM;  
 XX  
 DR WPI; 2000-499101/44.  
 XX  
 PT New peptide 3, amide and heterocyclic compounds and saccharide conjugates  
 PT used for inhibiting chemokine induced activity and for treating e.g.  
 PT stroke, vascular diseases, autoimmune diseases and tumor growth.  
 XX  
 PS Disclosure; Fig 18; 387pp; English.  
 XX  
 CC The present invention concerns the identification of a number of  
 CC chemokines which can be used to produce derivatives, agonists and  
 CC antagonists which are then useful in disease treatment. The chemokines  
 CC include sequences AAB15785-B15794, AAB15803-B15813 and AAB15831-B15848.  
 CC These chemokine derivatives can be used to treat diseases such as  
 CC autoimmune diseases, atherosclerosis, osteoporosis, HIV infection and  
 CC AIDS, psoriasis, inflammatory diseases, hypertension, basophil-mediated  
 CC diseases, endotoxaemia, myocardial infarction, acute ischaemia and  
 CC rheumatoid arthritis, and can be used to prevent strokes and as  
 CC contraceptives. The coding sequences for the chemokines can be used in  
 CC gene therapy for the same diseases, as well as in the production of  
 CC animal models

SQ Sequence 10 AA;

QY 1 RAFTI 6  
 |||||  
 5 RAFTI 10

Db

Query Match 71.8%; Score 28; DB 3; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 25;  
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 229  
 AAB92350  
 ID AAB92350 standard; peptide; 10 AA.  
 XX  
 AC AAB92350;  
 XX  
 DT 22-JUN-2001 (first entry)  
 XX  
 DE Virus related peptide SEQ ID NO:1526.  
 XX  
 KW Protection; endogenous therapeutic peptide; peptidase; conjugation;  
 KW blood component; modification; succinimide; maleimide group; amino;  
 KW hydroxyl; thiol; hormone; growth factor; neurotransmitter.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200069900-A2.  
 XX  
 PD 23-NOV-2000.  
 XX  
 PR 17-MAY-2000; 2000WO-US013576.  
 PR 17-MAY-1999; 99US-0134406P.  
 PR 10-SEP-1999; 99US-0153406P.  
 PR 15-OCT-1999; 99US-0159783P.  
 XX  
 PA (CONJ-) CONJUCHEM INC.  
 XX  
 PI Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudau K;  
 XX  
 DR WPI; 2001-112059/12.  
 XX  
 PF Modifying and attaching therapeutic peptides to albumin prevents  
 PF peptidase degradation, useful for increasing length of in vivo activity.  
 XX  
 PS Disclosure; Page 704; 733pp; English.  
 XX  
 CC The present invention describes a modified therapeutic peptide (I)  
 CC comprising a therapeutically active amino acid region (III) and a  
 CC reactive group (II) (e.g. succinimide and maleimide groups) attached to  
 CC a less therapeutically active amino acid region (IV), which covalently  
 CC bonds with amino/hydroxyl/thiol groups on blood components to form a  
 CC peptidase stabilised therapeutic peptide composed of 3-50 amino acids.  
 CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth  
 CC factors and neurotransmitters, to protect them from peptidase activity in  
 CC vivo for the treatment of various disorders. Endogenous therapeutic  
 CC peptides are not suitable as drug candidates as they require frequent  
 CC administration due to rapid degradation by peptidases in the body.  
 CC Modifying and attaching therapeutic peptides to albumin prevents or  
 CC reduces the action of peptidases to increase length of activity (half  
 CC life) and specificity as bonding to large molecules decreases  
 CC intracellular uptake and interference with physiological processes.  
 CC AAB90829 to AAB92441 represent peptides which can be used in the  
 CC exemplification of the present invention

XX  
 SQ Sequence 10 AA;

QY 1 RAFTI 6  
 |||||  
 5 RAFTI 10

Db

Query Match 71.8%; Score 28; DB 4; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 25;  
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFVTI 6  
 |||||  
 DB 5 RAFVTI 10

## RESULT 230

AAB49397

ID AAB49397 standard; peptide; 10 AA.

XX AAB49397;

XX 06-MAR-2001 (first entry)

XX HIV peptide SEQ ID NO: 12.

XX HIV; immunogenic peptide; immune response; monophosphoryl lipid A,  
 KM antigen; infection; cancer; amyloid deposition.

XX Human immunodeficiency virus.

XX WO200069456-A2.

XX 23-NOV-2000.

XX 12-MAY-2000; 2000WO-US013156.

XX 13-MAY-1999; 99US-0133963P.

XX (AMCY ) AMERICAN CYANAMID CO.

XX Hagen M;

XX WPI; 2001-024946/03.

PT Antigenic composition having an antigen (e.g. viral protein) and an  
 PT adjuvant, useful for enhancing humoral and cellular immune response in a  
 PT host or as a prophylaxis against virus, bacterium, parasite, cancer cell  
 PT or allergen.

XX Example 1; Page 41; 129pp; English.

XX The present invention provides an antigenic composition comprising an  
 CC antigen with a 3-O-deacetylated monophosphoryl lipid A or monophosphoryl  
 CC lipid A adjuvant. The presence of the adjuvant causes an increased immune  
 CC response. The antigen may be from a pathogenic bacterium, fungus, virus  
 CC or parasite, a cancer cell, an allergen or from amyloid peptide protein.  
 CC The composition can be used in the prevention and treatment of infection.  
 CC Cancer and diseases caused by amyloid deposition. It is particularly  
 CC useful against HIV, Neisseria gonorrhoeae and respiratory syncytial virus

XX Sequence 10 AA;

Query Match 71.8%; Score 28; DB 4; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 25;

Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFVTI 6  
 |||||  
 DB 5 RAFVTI 10

## RESULT 231

AAB04801

ID AAB04801 standard; peptide; 10 AA.

XX AAB04801;

XX 10-SEP-2001 (first entry)

XX Human immunodeficiency virus env protein derived restricted CTL epitope.

XX Human immunodeficiency virus; HIV; immunogen; anti-HIV; vaccine;  
 KM gene therapy; fusion protein; modified vaccinia virus Ankara vector; MVA.

KM cytotoxic T-lymphocyte; CTL; epitope.  
 XX Human immunodeficiency virus.

XX WO200147955-A2.

XX 05-JUL-2001.

XX 22-DEC-2000; 2000WO-GB004984.

XX 23-DEC-1999; 99GB-00030294.

XX 14-OCT-2000; 2000GB-00025234.

XX (MEDI-) MEDICAL RES COUNCIL.  
 PA (ITAL-) INT AIDS VACCINE INITIATIVE.

XX (UNNA-) UNIV NAIROBI.

XX Hanke T, Michael AJ;

XX WPI; 2001-418221/44.

XX Novel immunogen for stimulating anti-HIV immune response, has a portion  
 PT of gag protein of HIV from HIV clade, parts of p17, p24 and synthetic  
 PT polypeptide comprising human cytotoxic T-lymphocyte epitopes of HIV  
 PT protein.

XX Example 1; Page 8; 65pp; English.

XX The invention relates to human immunodeficiency virus immunogens and  
 CC their corresponding DNA molecules. An immunogen comprises a portion of  
 CC gag protein of HIV from an HIV clade, parts of p17 and p24, modified to  
 CC prevent N-terminal myristoylation; and a synthetic polypeptide comprising  
 CC human cytotoxic T-lymphocyte (CTL) epitopes of HIV protein. This  
 CC immunogen is designed to elicit an HIV-specific immune response in  
 CC humans. The immunogen is useful in the preparation of a medicament such  
 CC as vaccine to prevent or treat HIV infection in a human subject. The  
 CC invention also relates to method of stimulating anti-HIV immune response  
 CC in a human subject which comprises administering one or more times an  
 CC amount of nucleic acid molecule sufficient to prime an immune response to  
 CC the immunogen, or else may be packaged within a delivery means, such as a  
 CC modified vaccinia virus Ankara (MVA) to boost the immune response to  
 CC common portion of the immunogens. The present sequence is human  
 CC immunodeficiency virus env protein derived restricted CTL epitope related  
 CC to the invention. This restricted CTL epitope is presented by a murine  
 CC MHC class I used for the mouse potency assay

XX Sequence 10 AA;

Query Match 71.8%; Score 28; DB 4; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 25;

Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFVTI 6  
 |||||  
 DB 5 RAFVTI 10

## RESULT 232

ABP25102

ID ABP25102 standard; peptide; 10 AA.

XX ABP25102;

XX 15-JUL-2002 (first entry)

XX Human MHC peptide binding assay peptide #29.

XX HIV; HIV-1; human immunodeficiency virus; env; pol; gag; nef; vpr; vpu;  
 KM vif; tat; cytotoxic T lymphocyte; CTL; immune response; epitope; antigen;  
 XX vaccine; HIV infection; immunisation; virucide.

XX Homo sapiens.

PN WO200124810-A1.  
 XX 12-APR-2001.  
 XX  
 PF 05-OCT-2000; 2000WO-US027766.  
 XX  
 PR 05-OCT-1999; 99US-00412863.  
 XX  
 PA (EPIM-) EPIMMUNE INC.  
 XX  
 PI Sette A, Sidney J, Southwood S, Livingston BD, Chesnut R;  
 PI Baker DM, Cells E, Kubo RT, Grey HM;  
 XX WPI; 2001-354887/37.  
 DR  
 PT Vaccine compositions comprising human immunodeficiency virus-1 (HIV-1)  
 PT peptide groups, useful for vaccinating against HIV-1.  
 XX  
 PS Example 1; Page 416; 448pp; English.  
 XX  
 CC The present invention describes a composition (I) comprising a prepared  
 CC human immunodeficiency virus-1 (HIV-1) group comprising an amino acid  
 CC sequence selected from 51 defined amino acid sequences (AB25347 to  
 CC ABP25397). (I) has virucide activity and can be used in vaccines. (I) may  
 CC be used for immunizing subjects against HIV-1 infections. The use of  
 CC group-based vaccines has several advantages over traditional vaccines,  
 CC particularly when compared to the use of whole antigens in vaccine  
 CC compositions. There is evidence that the immune response to whole  
 CC antigens is directed largely toward variable regions of the antigen,  
 CC allowing for immune escape due to mutations. The groups for inclusion in  
 CC an group-based vaccine may be selected from conserved regions of viral or  
 CC tumour-associated antigens, which therefore reduces the likelihood of  
 CC escape mutants. Furthermore, immunosuppressive groups that may be present  
 CC in whole antigens can be avoided with the use of group-based vaccines. An  
 CC additional advantage of an group-based vaccine approach is the ability to  
 CC combine selected groups (CTL and HTL), and further, to modify the  
 CC composition of the groups, achieving, for example, enhanced  
 CC immunogenicity. Accordingly, the immune response can be modulated, as  
 CC appropriate, for the target disease. Similar engineering of the response  
 CC is not possible with traditional approaches. ABP11501 to ABP25412  
 CC represent peptide sequences used in the exemplification of the present  
 CC invention  
 XX  
 SQ Sequence 10 AA:  
 XX  
 QY Query Match 71.8%; Score 28; DB 4; Length 10;  
 XX Best Local Similarity 100.0%; Pred. No. 25;  
 Db Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX 1 RAFTVI 6  
 XX 5 RAFTVI 10  
 Db

RESULT 233  
 AAJ03832  
 ID AAJ03832 standard; peptide; 10 AA.  
 XX  
 AC AAJ03832;  
 XX  
 DT 02-JUL-2001 (first entry)  
 XX  
 DE Hepatitis C virus epitope #3823.  
 XX  
 KM Hepatitis C virus; HCV; epitope; vaccine; immunogen; HLA-binding motif;  
 KM antiviral.  
 XX  
 OS Hepatitis C virus.  
 XX  
 PN WO200121189-A1.  
 XX  
 PD 29-MAR-2001.  
 XX

PF 19-JUL-2000; 2000WO-US019774.  
 XX  
 PR 19-JUL-1999; 99US-00357737.  
 XX  
 PA (EPIM-) EPIMMUNE INC.  
 XX  
 PI Sette A, Sidney J, Southwood S, Livingston BD, Chesnut R;  
 PI Baker DM, Cells E, Kubo RT, Grey HM;  
 XX WPI; 2001-308046/32.  
 DR  
 PT A new composition useful as a vaccine against hepatitis C virus.  
 PT Disclosure; Page 188; 214pp; English.  
 XX  
 PS  
 XX  
 CC The present invention describes a composition comprising a prepared  
 CC hepatitis C virus (HCV) epitope such as those given in AAJ00010-AAJ04121.  
 CC These are derived from HCV HLA-binding motifs. They are useful in  
 CC vaccines for the prevention and treatment of HCV infection in humans. The  
 CC present sequence is an epitope used in the disclosure of the invention  
 CC  
 XX  
 SQ Sequence 10 AA:  
 XX  
 QY Query Match 71.8%; Score 28; DB 4; Length 10;  
 XX Best Local Similarity 100.0%; Pred. No. 25;  
 Db Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX 1 RAFTVI 6  
 XX 5 RAFTVI 10  
 Db

RESULT 234  
 AAJ20153  
 ID AAJ20153 standard; peptide; 10 AA.  
 XX  
 AC AAJ20153;  
 XX  
 DT 29-AUG-2003 (revised)  
 DT 18-JUN-2002 (first entry)  
 XX  
 DE Human immunodeficiency virus type 1 (HIV-1) R101 peptide.  
 XX  
 KM Human immunodeficiency virus type 1; HIV-1; adjuvant; immunomodulator;  
 KM alpha-2-macroglobulin; 3-O-deacylated monophosphoryl lipid; MPL; GM-CSF;  
 KM granulocyte macrophage colony stimulating factor; immune response;  
 KM vaccine; R101 peptide.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN WO200215930-A1.  
 XX  
 PD 28-FEB-2002.  
 XX  
 PF 27-AUG-2001; 2001WO-US026589.  
 XX  
 PR 25-AUG-2000; 2000US-0227624P.  
 XX  
 PA (UYDU-) UNIV DUKE.  
 XX  
 PI Haynes BF, Liao H, Patel DD;  
 PI WPI; 2002-269315/31.  
 DR  
 XX  
 XX Use of 2-macroglobulin (Masterisk), 3-O-deacylated monophosphoryl lipid  
 PT A (MPL) and granulocyte macrophage colony stimulating factor (GM-CSF) for  
 PT eliciting an immune response.  
 XX  
 PS Example 2; Page 21; 53pp; English.  
 XX  
 CC The invention relates to a composition comprising activated alpha-2-  
 CC macroglobulin (alpha 2M asterisk), 3-O-deacylated monophosphoryl lipid A  
 CC (MPL) and granulocyte macrophage colony stimulating factor (GM-CSF). The

invention also relates to an adjuvant suitable for use in multivalent HIV immunogenic compositions. The compositions is useful for eliciting an immune response. The present sequence is human immunodeficiency virus type 1 (HIV-1) R101 peptide used in the exemplification of the invention. (Updated on 29-AUG-2003 to standardise OS field)

Sequence 10 AA;

Query Match 71.8%; Score 28; DB 5; Length 10;  
Best Local Similarity 100.0%; Pred. No. 25;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFTI 6  
| | | | |  
Db 5 RAFTI 10

RESULT 235  
ABG1255  
ID ABG1255 standard; peptide; 10 AA.

XX AC ABG1255;  
XX DT 29-AUG-2003 (revised)  
XX DT 21-OCT-2002 (first entry)

XX DE GP120 classI restricted peptide.

XX HS; herpes; anti-HIV; cytostatic; immunomodulator; antibacterial;  
XX antiparasitic; cancer; lymphocytic leukaemia; lymphoma; glioblastoma;  
XX lung cancer; infectious disease; HIV; human immunodeficiency virus;  
XX human papilloma; influenza; bacteria; parasite; vaccine; tumour cells;  
XX gp120.

XX Human immunodeficiency virus 1.

XX WO200256828-A2.

XX 25-JUL-2002.

XX 29-NOV-2001; 2001WO-US047808.

XX 29-NOV-2000; 2000US-0253858P.

XX 30-NOV-2000; 2000US-0250079P.

XX (UVRP) UNIV ROCHESTER.

XX Federoff HJ, Bowers WJ, Freilinger JG, Willis RA, Evans TG;  
XX Dewhurst S, Hocknell PK;

XX WPI; 2002-590693/63.

Generating a herpesvirus amplicon particle for treating patients with cancer or infectious disease, comprises transfecting a cell with an amplicon vector, amplicon plasmid or nucleic acid sequence encoding an accessory protein.

Example 8; Page 21; 68pp; English.

This invention relates to a method for generating a herpesvirus amplicon particle comprising transfecting a cell with a Herpes simplex virus (HSV) amplicon vector, an amplicon plasmid or a nucleic acid sequence that encodes an accessory protein. The method of the invention may have anti-HIV, cytostatic, immunomodulator, antibacterial, and antiparasitic activity. The method of the invention is useful in generating herpesvirus amplicon particles for treating patients with cancer (e.g. chronic lymphocytic leukaemia, lymphoma, glioblastoma or lung cancer) or an infectious disease such as HIV or those caused by human papilloma virus, influenza virus, bacteria or parasite. The HSV amplicon particles or the vectors can also be useful as vaccines. Gene therapy vectors based on the herpes simplex virus exhibit a broad cellular tropism, they have the capacity to package large amounts of genetic material (which make them useful in expressing multiple genes or gene sequences), they have a high

transduction efficiency, and they are maintained episomally, which makes them less prone to insertional mutagenesis. In addition to infecting many different types of cells, HSV vectors can also transduce non-replicating or slowly-replicating cells. The method can also be carried out fairly quickly. As a result, cells (such as tumour cells) can be removed from a patient, treated, and readministered to the patient in the course of a single operative procedure. The present sequence represents a herpes simplex virus (HSV) gp120 peptide used to induce an immune response in the method of the invention. (Updated on 29-AUG-2003 to standardise OS field)

Sequence 10 AA;

Query Match 71.8%; Score 28; DB 5; Length 10;  
Best Local Similarity 100.0%; Pred. No. 25;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFTI 6  
| | | | |  
Db 5 RAFTI 10

RESULT 236  
AAU96032  
ID AAU96032 standard; protein; 10 AA.

XX AC AAU96032;

XX DT 29-AUG-2003 (revised)  
XX DT 02-JUL-2002 (first entry)

XX HIV epitope, HIV-1 gp120 A2, H-2Dd, peptide sequence.

XX Vaccine, non-replicating, viral tubule; immunogen; antibody, BTV;  
XX Bluetongue virus; foot and mouth disease virus; FMDV; influenza virus;  
XX human immunodeficiency virus; HIV; protective immunity; epitope; TUB;  
XX virus-derived tubule; anti-HIV; virucide.

XX Human immunodeficiency virus 1.

XX WO200226254-A2.

XX 04-APR-2002.

XX 27-SEP-2001; 2001WO-US030464.

XX 27-SEP-2000; 2000US-0235614P.

XX (UABR-) UAB RES FOUND.

XX Roy P;

XX WPI; 2002-339987/37.

A vaccine, for inducing an antiviral immune response, comprises a non-replicating vaccine delivery vehicle (which comprises a non-infectious recombinant viral tubule) carrying one or more immunogens.

Claim 8; Page 39; 65pp; English.

The present invention relates to a new vaccine comprising a non-replicating vaccine delivery vehicle (which comprises a non-infectious recombinant viral tubule) carrying one or more immunogens. The invention is useful for inducing an immune response, preferably anti-viral, in a subject. The administration of the vaccine is preferably followed by a subsequent administration of one or more virus like particles carrying an immunogen. It is also useful for administering to a patient for generating antibodies specific for one or more immunogens, such as bluetongue virus (BTV), foot and mouth disease virus (FMDV), influenza virus and human immunodeficiency virus (HIV). The invention provides an effective means of delivering multiple peptide components representing viral/tumour antigenic groups to elicit protective immunity, which has not previously been possible. The present amino acid sequence represents one of a



CC collection (AAU96022-AAU96045) of HIV epitopes that were used in the  
CC methods of the invention as immunogens. These epitopes were used to  
CC construct chimeric NS1-TUBS (virus-derived tubules) which show  
CC immunogenicity. (Updated on 29-AUG-2003 to standardise OS field)  
XX  
SQ Sequence 10 AA;

Query Match 71.8%; Score 28; DB 5; Length 10;  
Best Local Similarity 100.0%; Pred. No. 25;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTVI 6  
|||||  
DB 5 RAFTVI 10

## RESULT 237

ABU09700  
ID ABU09700 standard; peptide; 10 AA.

XX ABU09700;

DT 14-NOV-2002 (first entry)

DE Hepatitis B virus epitope #3652.

XX Hepatitis B virus; HBV; epitope; vaccine; HBV infection; hepatitis;

KM virucide; hepatocytic; antiinflammatory.

XX Hepatitis B virus.

OS WO200219986-A1.

PN 14-MAR-2002.

PD 08-SEP-2000; 2000MO-US024802.

PF 08-SEP-2000; 2000MO-US024802.

XX 08-SEP-2000; 2000MO-US024802.

PA (EPIV-) EPIVONE INC.

PA (SETT/) SETT A.

XX Sette A, Sidney J, Southwood S, Vitiello MA, Livingston BD;

PI Cells E, Kudo RT, Grey HM, Chesnut RW;

DR WPI; 2002-643192/69.

XX Vaccine composition for treating or preventing hepatitis B virus (HBV)

PT infection, and/or for stimulating an immune response to HBV, comprises a

PT HBV peptide epitope.

XX Disclosure; Page 196; 228pp; English.

XX The present invention relates to a composition comprising at least one

CC hepatitis B virus epitope. This can be used in the production of a

CC vaccine for use in preventing or treating hepatitis B virus infection.

CC The present sequence is a peptide described in the exemplification of the

CC invention

XX Sequence 10 AA;

Query Match 71.8%; Score 28; DB 5; Length 10;  
Best Local Similarity 100.0%; Pred. No. 25;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTVI 6  
|||||  
DB 5 RAFTVI 10

## RESULT 238

ABU57440  
ID ABU57440 standard; peptide; 10 AA.

XX ABU57440;

AC 08-APR-2003 (first entry)

DT HIV cytotoxic lymphocyte epitope #4.

XX

KM MHC; major histocompatibility complex; human; cytotoxic; anti-HIV;

KM antiinflammatory; dermatological; antiasthmatic; antidiabetic; virucide;

KM antiparasitic; antitumor; antineoplastic; antiarthritic; AIDS;

KM Crohn's disease; ulcerative colitis; inflammatory bowel disease; measles;

KM rheumatoid arthritis; psoriasis; atopic dermatitis; asthma; chicken pox;

KM malignant melanoma; carcinoma; cancer; leukaemia; lymphoma; hepatitis;

KM rubella; herpes; human immunodeficiency virus.

OS Human immunodeficiency virus.

PN WO200272631-A2.

PD 19-SEP-2002.

PF 13-MAR-2002; 2002MO-DK000169.

XX 14-MAR-2001; 2001DK-00000435.

PR 14-MAR-2001; 2001DK-00000436.

PR 14-MAR-2001; 2001DK-00000441.

PR 14-MAR-2001; 2001US-0275447P.

PR 14-MAR-2001; 2001US-0275448P.

XX 14-MAR-2001; 2001US-0275470P.

PA (DAKO-) DAKOCYTOMATION DENMARK AS.

PA (DYNA-) DYNAL BIOTECH ASA.

PI Winther L, Petersen LO, Buus S, Schoeller J, Ruub E, Aarnelien O;

XX WPI; 2002-759837/82.

DR New Major Histocompatibility Complex (MHC) molecule construct, useful for

PT treating, preventing, stabilizing or alleviating a disease involving MHC

PT recognizing cells e.g., cancer.

XX Disclosure; Fig 37; 304pp; English.

PS This invention relates to a new Major Histocompatibility Complex (MHC)

XX molecule construct comprising a carrier molecule to which one or more MHC

CC molecules are attached either directly or via one or more entities. The

CC construct of the invention may have cytostatic, antiinflammatory,

CC dermatological, antiparasitic, antidiabetic, anti-HIV, virucide,

CC antiparasitic and immunosuppressive activities and may be used in gene

CC therapy. The MHC molecule construct is useful as a therapeutic

CC composition in vivo or ex vivo therapy, for treating, preventing,

CC stabilizing or alleviating a disease involving MHC recognizing cells, for

CC monitoring MHC recognizing cells or establishing a prognosis of a disease

CC or diagnosing a disease, or determining the status of a disease or the

CC effectiveness of a medicament against a disease, involving MHC

CC recognizing cells, e.g., chronic inflammatory bowel disease such as

CC Crohn's disease or ulcerative colitis, scleritis, type I diabetes,

CC rheumatoid arthritis, psoriasis, atopic dermatitis, asthma, malignant

CC melanoma, renal carcinoma, breast cancer, lung cancer, cancer of the

CC uterus, cervical cancer, prostate cancer, brain cancer, head and neck

CC cancer, leukaemia, cutaneous lymphoma, hepatic carcinoma, colorectal

CC cancer, bladder cancer, rejection-related disease, Graft-versus-host

CC related disease, or a viral disease associated with hepatitis, Acquired

CC immunodeficiency Syndrome (AIDS), measles, pox, chicken pox, rubella or

CC herpes. The MHC molecule construct is also useful for flow cytometry,

CC histology or cytology. The present sequence represents a peptide used to

CC create the MHC molecule construct of the invention

XX Sequence 10 AA;

Query Match 71.8%; Score 28; DB 5; Length 10;

Best Local Similarity 100.0%; Pred. No. 25;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFVTI 6  
| | | | |  
5 RAFVTI 10

RESULT 239  
AAE26082

ID AAE26082 standard; peptide; 10 AA.

AC AAE26082;

DT 29-AUG-2003 (revised)  
DT 14-NOV-2002 (first entry)

DE Human immunodeficiency virus type 1 (HIV-1) peptide, IIB.

KW Antigenic composition; cancer; aminoalkyl glucosamine phosphate compound;  
KW AAg; immune response; cytotoxic T lymphocyte; allergic response; tumour;  
KW amyloid deposition; vaccine; antifungal; antibacterial; antiparasitic;  
KW cytoskeletal; immunostimulant; virucide; HIV-1 peptide.

OS Human immunodeficiency virus 1.

PN W0200238177-A2.

PD 16-MAY-2002.

PF 08-NOV-2001; 2001WO-US046943.

PR 10-NOV-2000; 2000US-0247100P.  
PR 18-OCT-2001; 2001US-0330345P.

PA (AMCY ) AMERICAN CYANAMID CO.

PI Hagen M;

DR WPI; 2002-636409/68.

XX Antigenic composition for use in enhancing immune response of antigen,  
XX has selected antigen, and combination of adjuvant comprising an  
XX aminoalkyl glucosamine phosphate compound, and cytokine or lymphokine.

PS Example 1; Page 28; 94pp; English.

XX The invention relates to an antigenic composition comprising a selected  
XX antigen from a pathogenic virus, bacterium, fungus or parasite, or from a  
XX cancer or tumour cell, or from an allergen, or from a self molecule; and  
XX an combination of adjuvant comprising an aminoalkyl glucosamine phosphate  
XX compound (AGP), or its derivative or analogue, and a cytokine or  
XX lymphokine, or an agonist to it. The invention is useful for increasing  
XX the ability of an antigenic composition (enhancing immune response)  
XX containing a selected antigen from a pathogenic virus, bacterium, fungus  
XX or parasite to elicit an immune response especially cytotoxic T  
XX lymphocytes; a selected antigen a cancer or tumour cell to elicit  
XX therapeutic or prophylactic anti-cancer effect; a selected allergen to  
XX moderate an allergic response; or a selected antigen from a molecule or  
XX its portion representing those produced by a host in an undesired manner,  
XX amount or location so as to reduce an undesired effect, in a vertebrate  
XX host. The invention is useful for increasing the ability of an antigenic  
XX composition to prevent or treat disease characterised by amyloid  
XX deposition in a vertebrate host. The invention is useful as a vaccine.  
XX The present sequence is HIV-1 peptide, IIB. This peptide corresponds to  
XX the CTL epitope within the V3 loop of HIV-1-IIB. (Updated on 29-AUG-2003  
XX to standardise OS field)

SO Sequence 10 AA;

Query Match 71.8%; Score 28; DB 5; Length 10;  
Best Local Similarity 100.0%; Pred. No. 25;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFVTI 6  
| | | | |  
5 RAFVTI 10

RESULT 240  
AAE13217

ID AAE13217 standard; peptide; 10 AA.

AC AAE13217;

DT 29-AUG-2003 (revised)  
DT 12-FEB-2002 (first entry)

DE HIV-1 class I-restricted gp120 peptide.

KW Cytotoxic T lymphocyte; CTL; T cell; tumour load; cancer radiotherapy;  
KW immunostimulatory sequence oligonucleotide; ISS-ODN; chemotherapy;  
KW immunosuppression; transplantation; autoimmune disease; infection;  
KW acquired immune deficiency syndrome; AIDS; intracellular pathogen;  
KW cytomegalovirus; mycobacterial infection; Epstein-Barr virus;  
KW varicella zoster virus; human immunodeficiency virus; HIV.

OS Human immunodeficiency virus 1.

PN W0200172123-A1.

PD 04-OCT-2001.

PF 28-MAR-2001; 2001WO-US010118.

PR 28-MAR-2000; 2000US-0192537P.  
PR 11-MAY-2000; 2000US-0203567P.  
PR 05-JUL-2000; 2000US-0215895P.

PA (REGC ) UNIV CALIFORNIA.  
PA (VETE-) DEPT VETERANS AFFAIRS.

PI Raz E, Cho HJ, Richman DD, Horner AA;

DR WPI; 2002-010699/01.

XX Increasing antigen-specific cytotoxic T lymphocyte activity in a CD4+ T  
XX cell deficient individual, useful to treat immunodeficiency and block HIV  
XX infection, comprises administering immunostimulatory nucleic acid.

PS Example 8; Page 57; 91pp; English.

XX The present invention relates to a method for increasing antigen-specific  
XX cytotoxic T lymphocyte (CTL) activity in a CD4+ T cell-deficient  
XX individual, comprising administering an immunostimulatory sequence  
XX oligonucleotide (ISS-ODN). The immunostimulatory nucleic acids of the  
XX invention are used in CD4+ T cell-deficient individuals to decrease  
XX tumour load, to treat a primary or acquired immunodeficiency,  
XX particularly where the acquired immunodeficiency is temporary and due to  
XX cancer radiotherapy or chemotherapy or immunosuppression following bone  
XX marrow or organ transplantation, or autoimmune disease treatment, or is  
XX acquired immunodeficiency syndrome (AIDS). The nucleic acids may be used  
XX to treat a person at risk of becoming CD4+ T cell-deficient, particularly  
XX where someone at risk of cancer recurrence. They are also used to treat  
XX infection, particularly by an intracellular pathogen, especially one  
XX caused by cytomegalovirus, Mycobacterium tuberculosis, M. avium, Epstein-  
XX Barr virus, a fungus yeast, varicella zoster virus or human  
XX immunodeficiency virus (HIV). The present sequence is a HIV-1 class I-  
XX restricted gp120 peptide, used in the exemplification of the invention.  
XX (Updated on 29-AUG-2003 to standardise OS field)

SO Sequence 10 AA;

Query Match 71.8%; Score 28; DB 5; Length 10;  
Best Local Similarity 100.0%; Pred. No. 25;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTI 6  
 |||||  
 DB 5 RAFVTI 10

## RESULT 241

ABG68655  
 ID ABG68655 standard; peptide; 10 AA.

AC ABG68655;

DT 29-AUG-2003 (revised)

DT 07-OCT-2002 (first entry)

DE HIV-1 P18 V3 loop peptide antigen #1.

XX Eliciting an immune response; peptide antigen; T-cell epitope;

KW tumour antigen; viral antigen; non-viral vector; HIV-1;

KW T-cell co-stimulatory molecule; human immunodeficiency virus;

XX immunostimulant.

OS Human immunodeficiency virus 1; (IIB isolate).

XX US2002044948-A1.

PN 18-APR-2002.

PF 14-MAR-2001; 2001US-00810310.

PR 15-MAR-2000; 2000US-0189396P.

XX (KHE/) KHEIF S.

PA (BERZ/) BERZOFISKY J.

XX Khleif S, Berzofsky J;

PI WPI; 2002-507231/54.

XX Administering a non-viral vector encoding a co-stimulatory molecule

PT alongside a peptide or protein T cell epitope, elicits increased response

PT to the antigen and is useful to enhance peptide and protein based

PT vaccines and treatments.

XX Disclosure; Page 7; 39pp; English.

XX The present invention relates to a method for eliciting an immune

CC response in a subject. The method comprises administering a peptide or

CC protein antigen comprising T-cell epitope(s) (e.g. tumour antigen, viral

CC or non-viral antigen) coordinately with a non-viral vector comprising a

CC polynucleotide encoding a T-cell co-stimulatory molecule. Viral peptide

CC antigens may include human immunodeficiency virus (HIV) antigen,

CC hepatitis B virus (HBV), herpes simplex virus (HSV) or human papilloma

CC virus (HPV). The method is useful to elicit an immune response in a

CC subject, and to supplement and enhance peptide and protein based vaccines

CC and treatment methods. ABG68640-ABG68700 represent HIV-1 peptide antigens

CC useful in the method of the present invention. (Updated on 29-AUG-2003 to

CC standardise OS field)

XX Sequence 10 AA;

QY Query Match 71.8%; Score 28; DB 5; Length 10;

Best Local Similarity 100.0%; Pred. No. 25;

Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 1 RAFVTI 6

5 RAFVTI 10

RESULT 242

ABG80230

ID ABG80230 standard; peptide; 10 AA.

XX ABG80230;

AC 29-AUG-2003 (revised)

DT 15-NOV-2002 (first entry)

DE MHC class I molecule, viral epitope #478.

XX Major histocompatibility complex; MHC; MHC class I molecule; virus;

KW epitope; cytotoxic T lymphocyte response; CTL response; lymphatic system;

KW antigen; immunogenic; malignant tumour; carcinoma; melanoma; leukaemia;

KW lymphoma; infectious disease; hepatitis; malaria; measles; tuberculosis;

XX acquired immune deficiency syndrome; AIDS.

OS Viruses.

XX WO200262368-A2.

PN 15-AUG-2002.

PD 22-JAN-2002; 2002WO-US002033.

PF 02-FEB-2001; 2001US-0076232.

PR (CTL-I-) CTL IMMUNOTHERAPIES CORP.

XX Kunding TM, Simard JLI;

PI WPI; 2002-657506/70.

DR Inducing or sustaining immunological cytotoxic T lymphocyte response in a

XX mammal, useful for treating a mammal with malignant tumor or infectious

PT disease, by directly administering an antigen to the lymphatic system of

PT the mammal.

XX Disclosure; Page 39; 73pp; English.

XX The invention relates to a method of inducing and/or sustaining an

CC immunological cytotoxic T lymphocyte (CTL) response in a mammal

CC comprising administering directly to the lymphatic system of the mammal:

CC (a) an antigen in the form of a polypeptide; (b) a vector comprising a

CC nucleic acid encoding the antigen; or (c) a non-peptide antigen. The

CC method is useful for inducing and/or sustaining CTL response in a mammal.

CC This is particularly useful for treating a mammal having a malignant

CC tumour (e.g. carcinoma, melanoma, leukaemia or lymphoma) or infectious

CC disease (e.g. hepatitis, acquired immune deficiency syndrome (AIDS),

CC malaria, measles or tuberculosis), or in an animal having a

CC predisposition to these diseases. The mammal may be dogs, cats, mice,

CC cattle, sheep, pigs, goats, rabbits, or preferably humans. ABG79753-

CC ABG80319 represent viral epitopes on major histocompatibility complex

CC (MHC) class I molecules, used in the method of the invention. (Updated on

CC 29-AUG-2003 to standardise OS field)

XX Sequence 10 AA;

QY Query Match 71.8%; Score 28; DB 5; Length 10;

Best Local Similarity 100.0%; Pred. No. 25;

Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 1 RAFVTI 6

5 RAFVTI 10

RESULT 243

ABG79846

ID ABG79846 standard; peptide; 10 AA.

AC ABG79846;

DT 15-NOV-2002 (first entry)

DE MHC class I molecule, viral epitope #94.

```

XX Major histocompatibility complex; MHC; class I molecule; virus;
KM epitope; cytotoxic T lymphocyte response; CTL response; lymphatic system;
KM antigen; immunogenic; malignant tumour; carcinoma; melanoma; leukaemia;
KM lymphoma; infectious disease; hepatitis; malaria; measles; tuberculosis;
KM acquired immune deficiency syndrome; AIDS.
XX
OS Human immunodeficiency virus.
PN WO200262368-A2.
PD 15-AUG-2002.
XX
PF 22-JAN-2002; 2002WO-US002033.
XX
PR 02-FEB-2001; 2001US-00776232.
XX
PA (CTL1-) CTL IMMUNOTHERAPIES CORP.
XX
PI Kundig TM, Simard JUL;
XX
DR WPI; 2002-657506/70.
XX
PT Inducing or sustaining immunological cytotoxic T lymphocyte response in a
PT mammal, useful for treating a mammal with malignant tumor or infectious
PT disease, by directly administering an antigen to the lymphatic system of
PT the mammal.
XX
PS Disclosure; Page 20; 73pp; English.
XX
SQ The invention relates to a method of inducing and/or sustaining an
CC immunological cytotoxic T lymphocyte (CTL) response in a mammal
CC comprising administering directly to the lymphatic system of the mammal:
CC (a) an antigen in the form of a polypeptide; (b) a vector comprising a
CC nucleic acid encoding the antigen; or (c) a non-peptide antigen. The
CC method is useful for inducing and/or sustaining CTL response in a mammal.
CC This is particularly useful for treating a mammal having a malignant
CC tumour (e.g. carcinoma, melanoma, leukaemia or lymphoma) or infectious
CC disease (e.g. hepatitis, acquired immune deficiency syndrome (AIDS),
CC malaria, measles or tuberculosis), or in an animal having a
CC predisposition to these diseases. The mammal may be dogs, cats, mice,
CC cattle, sheep, pigs, goats, rabbits, or preferably humans. ABG79753-
CC ABG80319 represent viral epitopes on major histocompatibility complex
CC (MHC) class I molecules, used in the method of the invention
XX
SQ Sequence 10 AA;
Query Match 71.8%; Score 28; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 25;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RAFTYI 6
DB 5 RAFTYI 10

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XX
PD 28-NOV-2002.
XX
PF 20-MAY-2002; 2002WO-GB002336.
XX
PR 18-MAY-2001; 2001US-0291654P.
XX
PR 18-MAY-2001; 2001US-0291655P.
XX
PA (POWD-) POWDERJECT VACCINES INC.
PA (POWD-) POWDERJECT RES LTD.
XX
PI Fuller D, Fuller J, Haynes J, Shipley T;
XX
DR WPI; 2003-148439/14.
XX
PT Recombinant nucleic acid for the treatment and prophylaxis of acquired
PT immunodeficiency syndrome, comprises a nucleic acid sequence encoding an
PT antigen containing two or more cytolytic T lymphocyte (CTL) epitopes or
PT its analogs.
XX
PS Example 1; Col 79; 42pp; English.
XX
CC The invention relates to a recombinant nucleic acid comprising a nucleic
CC acid sequence encoding an antigen containing two or more cytolytic T
CC lymphocyte (CTL) epitopes or its analogues. Sequences of the invention
CC are used in vaccines and are useful for the treatment and prophylaxis of
CC human immunodeficiency virus (HIV) infection, particularly acquired
CC immune deficiency syndrome (AIDS). The invention is also useful in gene
CC therapy. The present sequence is HIV CTL epitope. This sequence is used
CC in the exemplification of the invention
XX
SQ Sequence 10 AA;
Query Match 71.8%; Score 28; DB 6; Length 10;
Best Local Similarity 100.0%; Pred. No. 25;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RAFTYI 6
DB 5 RAFTYI 10

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RESULT 245
ABP60029
ID ABP60029 standard; peptide; 10 AA.
XX
AC ABP60029;
XX
DT 07-MAR-2003 (first entry)
XX
DE HIV antigenic peptide.
XX
XX TOP; thimet oligopeptidase; EC3.4.25.15; cytostatic; tumour;
KM immunostimulant; major histocompatibility complex class I; MHC;
KM T-cell immunity.
XX
OS Human immunodeficiency virus.
XX
PN WO200279388-A2.
PD 10-OCT-2002.
XX
PF 01-APR-2002; 2002WO-US010385.
XX
PR 30-MAR-2001; 2001US-0280669P.
XX
PA (UYMA-) UNIV MASSACHUSETTS.
XX
PI Rock KL, Goldberg AL;
XX
DR WPI; 2003-103265/09.
XX
PT New recombinant cell comprising an exogenously derived nucleic acid

```

PT coding for a thimet oligopeptidase polypeptide, useful for modulating an  
 PT antigenic response in a mammal for treating e.g., tumor.  
 XX  
 PS Example 1; Page 50; 73pp; English.  
 CC The invention relates to a new recombinant cell comprising an exogenously  
 CC derived nucleic acid that codes for a thimet oligopeptidase (TOP)  
 CC polypeptide. The TOP polypeptide is overexpressed in the cell compared to  
 CC a wild-type cell from which the recombinant cell is derived. The activity  
 CC of TOP may be described as cytosolic and immunostimulatory. Thimet  
 CC oligopeptidase (TOP, EC3.4.25.15) plays a key role in modulating levels  
 CC of major histocompatibility complex (MHC) class I-presented peptides. The  
 CC recombinant host cell of the invention is useful for modulating an  
 CC antigenic response in a mammal. Methods of the invention are useful for  
 CC screening a test compound for its ability to serve as an immunomodulatory  
 CC agent and identifying an antigen resistant to thimet oligopeptidase  
 CC degradation. A method of the invention is useful for increasing CD8 T-  
 CC cell immunity, which uses vaccination with a TOP inhibitor for decreasing  
 CC TOP expression or activity. The vaccination method uses treated tumour  
 CC cells, antigen bearing/pulsed dendritic cells or infection of a viral  
 CC vector. The recombinant host cell is useful for treating tumours. The  
 CC current sequence represents an HIV (human immunodeficiency virus) gp160  
 CC antigenic peptide used in an example from the invention  
 CC  
 SQ Sequence 10 AA;  
 CC  
 Query Match 71.8%; Score 28; DB 6; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 25;  
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RAFTYI 6  
 |||||  
 Db 5 RAFTYI 10  
 RESULT 246  
 ABR39122  
 ID ABR39122 standard; peptide; 10 AA.  
 XX  
 AC ABR39122;  
 XX  
 DT 23-OCT-2003 (revised)  
 DT 10-MAY-2003 (first entry)  
 XX  
 DE HIV-1 gp120 CTL epitope peptide SEQ ID NO 22.  
 XX  
 XX ADP-ribosylating exotoxin; immune response; immunisation; vaccine;  
 KM adjuvant; HIV; gp120; CTL epitope.  
 XX  
 KM Human immunodeficiency virus 1.  
 OS  
 PN WO2003004055-A2.  
 XX  
 PD 16-JAN-2003.  
 XX  
 PF 26-NOV-2001; 2001WO-US043151.  
 XX  
 PR 27-NOV-2000; 2000US-00724315.  
 XX  
 PA (POWD-) POWDERJECT VACCINES INC.  
 XX  
 PI Haynes JR, Arrington JE;  
 XX  
 DR WPI; 2003-221541/21.  
 XX  
 PT New compositions comprising nucleic acid adjuvants, useful in  
 PT immunization techniques, particularly for eliciting or enhancing an  
 PT immune response against an antigen in a human.  
 XX  
 PS Example 5; Page 71; 143pp; English.  
 CC The invention relates to a composition comprising: (a) a first nucleic  
 CC acid sequence that is a truncated A subunit coding region obtained or

CC derived from a bacterial ADP-ribosylating exotoxin; and (b) a second  
 CC nucleic acid sequence that is a truncated B subunit coding region  
 CC obtained or derived from a bacterial ADP-ribosylating exotoxin. Each of  
 CC the truncated subunit coding regions has a 5' deletion and encodes a  
 CC subunit peptide not having an amino terminal bacterial signal peptide.  
 CC The composition is useful for eliciting an immune response against an  
 CC antigen or for manufacturing a medicament for enhancing an immune  
 CC response in a vertebrate subject (specifically a human) against an  
 CC antigen. The composition is particularly useful as nucleic acid adjuvants  
 CC for use in immunisation techniques. The present sequence is that of a HIV  
 CC gp120 CTL epitope peptide, used in examples of the invention to test for  
 CC the adjuvant effects of plasmids pPV2002 and pPV2003 in enhancing the  
 CC humoral and cellular immune responses to HIV-1 gp120. (Updated on 23-OCT-  
 CC 2003 to standardise OS field)  
 CC  
 SQ Sequence 10 AA;  
 CC  
 Query Match 71.8%; Score 28; DB 6; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 25;  
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RAFTYI 6  
 |||||  
 Db 5 RAFTYI 10  
 RESULT 247  
 ABP72314  
 ID ABP72314 standard; peptide; 10 AA.  
 XX  
 AC ABP72314;  
 XX  
 DT 23-OCT-2003 (revised)  
 DT 08-MAY-2003 (first entry)  
 XX  
 DE HIV-1 p18 protein CD8+ T cell epitope.  
 XX  
 KM HIV-1; antigen; epitope; infection; vaccine; glycosylceramide; adjuvant;  
 KM virucide; anti-HIV.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN WO2003009812-A2.  
 XX  
 PD 06-FEB-2003.  
 XX  
 PF 24-JUL-2002; 2002WO-US023673.  
 XX  
 PR 25-JUL-2001; 2001US-0308056P.  
 XX  
 PA (UTNY) UNIV NEW YORK STATE.  
 XX  
 PI Teuji M, Gonzalez-Aseguinolaza G, Nussenzweig RS, Koezuka Y;  
 XX  
 DR WPI; 2003-266011/26.  
 XX  
 PT Augmenting the immunogenicity of an antigen in a mammal, useful for  
 PT treating cancer, viral infection and malaria, comprises immunizing the  
 PT mammal with the antigen conjointly with adjuvant comprising a  
 PT glycosylceramide.  
 XX  
 PS Claim 55; Page 75; 97pp; English.  
 XX  
 CC The present sequence is that of an HIV-specific antigen comprising the  
 CC CD8+ T cell epitope of HIV-1 p18 protein. A claimed method for enhancing  
 CC a T cell response to HIV antigen in a susceptible mammalian (human) host  
 CC comprising co-administering an HIV-specific antigen such as the present  
 CC antigen and alpha-galactosylceramide as adjuvant. The HIV-specific  
 CC antigen may be presented by a recombinant virus such as a recombinant  
 CC adenovirus, pox virus or Sindbis virus. This is an example of the method  
 CC of the invention for augmenting the immunogenicity of an antigen in a  
 CC mammal by immunising the mammal with the antigen and with a  
 CC glycosylceramide adjuvant. This adjuvant enhances and/or prolongs antigen

-specific Th1-type responses, particularly CD8+ T cell responses. In an example from the invention, co-administration of alpha-galactosylceramide to mice immunised with the present T cell epitope enhanced almost 3 times the level of HIV-specific CD8+ T cell response compared to that induced in mice immunised without alpha-galactosylceramide treatment. (Updated on 23-OCT-2003 to standardise OS field)

XX Sequence 10 AA;

Query Match 71.8%; Score 28; DB 6; Length 10;  
Best Local Similarity 100.0%; Pred. No. 25;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTI 6  
| | | | |  
Db 5 RAFVTI 10

RESULT 248

ADA50228  
ID ADA50228 standard; peptide; 10 AA.

AC ADA50228;

DT 20-NOV-2003 (first entry)

XX Human immunodeficiency virus gp120 peptide.

DE DNA expression vector; immune response; immunopotentiating chemokine;  
XX immunogenic polypeptide; infectious agent; cancerous cell;  
KM immunostimulant; immunosuppressant; cytostatic; gene therapy; cancer;  
KM tumour; metastatic cancer; infectious disease; autoimmune disease;  
KM stimulating T cell activity; suppressing T cell activity;  
KM macrophage inflammatory protein; HIV; gp120.

XX Human immunodeficiency virus.

OS US6562800-B1.

XX 13-MAY-2003.

PD 29-OCT-1999; 99US-00430470.

PF 30-OCT-1998; 98US-0106506P.

PR (UYSC-) UNIV SOUTHERN CALIFORNIA.

XX Mcmillan M;

PI WPI; 2003-584408/55.

XX New DNA expression vectors comprising a DNA encoding an  
PT immunopotentiating chemokine and a DNA encoding a heterologous  
PT immunogenic polypeptide, useful for inducing an immune response, and for  
PT treating cancers.

XX Example; Col 20; 40pp; English.

PS This invention relates to a novel DNA expression vector for inducing an  
XX immune response. The DNA expression vector of the invention encodes both  
CC an immunopotentiating chemokine sequence as well as an immunogenic  
CC polypeptide sequence which is derived from an infectious agent or  
CC cancerous cell. The chemokines are preferably selected from the animal to  
CC be treated. The vaccine of the invention may have immunostimulant,  
CC immunosuppressant and cytostatic activities and used for a form of gene  
CC therapy. The expression vector and compositions comprising the vector of  
CC the invention may therefore be useful for inducing an immune response in  
CC a mammal, and for treating cancers (tumours and metastatic form of  
CC cancer), infectious diseases, autoimmune diseases and other diseases that  
CC can be alleviated by either stimulating or suppressing T cell activity.  
CC The present sequence is the amino acid sequence of the human  
CC immunodeficiency virus gp120 peptide which was used during the  
CC exemplification of the invention.

XX Sequence 10 AA;

Query Match 71.8%; Score 28; DB 6; Length 10;  
Best Local Similarity 100.0%; Pred. No. 25;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTI 6  
| | | | |  
Db 5 RAFVTI 10

RESULT 249

ADE79992  
ID ADE79992 standard; peptide; 10 AA.

AC ADE79992;

DT 29-JAN-2004 (first entry)

DE HIV1 carrier peptide to augment anti-malaria CD8+ T-cell immune response.

XX antimalarial; cytostatic; vaccine; immune response;  
KM non-hepadnaviral antigen; hepatitis B core particle; CD8+ T-cell;  
KM epitope; poxvirus vector; cancer; malaria; epitope.

XX Human immunodeficiency virus 1.

OS WO2003066833-A2.

XX 14-AUG-2003.

PD 07-FEB-2003; 2003WO-US003897.

PF 08-FEB-2002; 2002US-0354963P.

PR (UYNY-) UNIV NEW YORK MEDICAL CENT.

XX Zavala F, Birkett AJ;

PI WPI; 2003-748124/70.

XX Generating an immune response against a non-hepadnaviral antigen in a  
PT mammal, useful for treating or preventing cancer or malaria, by  
PT administering a priming component comprising a recombinant hepatitis B  
PT core particle.

XX Disclosure; SEQ ID NO 48; 85pp; English.

PS The invention relates to a method of generating an immune response  
XX against a non-hepadnaviral antigen in a mammal by administering (to the  
CC mammal) at least 1 dose of a priming component comprising a recombinant  
CC hepatitis B core particle (rHBp) (which is a carrier for 1 or more non-  
CC hepadnaviral CD8+ T-cell epitopes of the antigen). The method may be  
CC supplemented by the use of a boosting stage comprising a non-replicating  
CC or replication-impaired recombinant poxvirus vector. The method is useful  
CC for generating an immune response against a non-hepadnaviral antigen in a  
CC mammal for treating or preventing cancer or malaria. This sequence  
CC represents a peptide from human immunodeficiency virus type 1 (HIV-1)  
CC used as a carrier peptide to augment the immune response against a  
CC Plasmidum peptide.

XX Sequence 10 AA;

Query Match 71.8%; Score 28; DB 7; Length 10;  
Best Local Similarity 100.0%; Pred. No. 25;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTI 6  
| | | | |  
Db 5 RAFVTI 10

RESULT 250

AD879994  
ID ADE79994 standard; peptide: 10 AA.

AC ADE79994;

DT 29-JAN-2004 (first entry)

DE HIV1 carrier peptide to augment anti-malaria CD8+ T-cell immune response.

KW antimalarial; cytostatic; vaccine; immune response;

KW non-hepadnaviral antigen; hepatitis B core particle; CD8+ T-cell;

OS Human immunodeficiency virus 1.

PN WO2003066833-A2.

PD 14-AUG-2003.

PF 07-FEB-2003; 2003WO-US003897.

PR 08-FEB-2002; 2002US-0354963P.

PA (UNYNY-) UNIV NEW YORK MEDICAL CENT.

PI Zavala F, Birkett AJ;

DR WPI; 2003-748124/70.

PT Generating an immune response against a non-hepadnaviral antigen in a

PT mammal, useful for treating or preventing cancer or malaria, by

PT administering a priming component comprising a recombinant hepatitis B

PT core particle.

PS Disclosure; SEQ ID NO 50; 85bp; English.

CC The invention relates to a method of generating an immune response

CC against a non-hepadnaviral antigen in a mammal by administering (to the

CC mammal) at least 1 dose of a priming component comprising a recombinant

CC hepatitis B core particle (rHCP) (which is a carrier for 1 or more non-

CC hepadnaviral CD8+ T-cell epitopes of the antigen). The method may be

CC supplemented by the use of a boosting stage comprising a non-replicating

CC or replication-impaired recombinant poxvirus vector. The method is useful

CC for generating an immune response against a non-hepadnaviral antigen in a

CC mammal for treating or preventing cancer or malaria. This sequence

CC represents a peptide from human immunodeficiency virus type 1 (HIV-1)

CC used as a carrier peptide to augment the immune response against a

CC Plasmodium peptide.

SQ Sequence 10 AA;

Query Match 71.8%; Score 28; DB 7; Length 10;

Best Local Similarity 100.0%; Pred.No. 25;

Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYI 6

DB 5 RAFTYI 10

Search completed: May 16, 2005, 10:02:57  
Job time : 72 secs

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Sequence: 1 refvligk 8

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Gapop 10.0 , Gapext 0.5

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Pred. No. is the number of results predicted by chance to have a  
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and is derived by analysis of the total score distribution.

## SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description       |
|------------|-------|-------------|--------|----|-------------------|
| 1          | 39    | 100.0       | 8      | 1  | US-08-260-086-6   |
| 2          | 39    | 100.0       | 8      | 3  | US-08-480-332-3   |
| 3          | 39    | 100.0       | 8      | 5  | PCT-US92-10378-5  |
| 4          | 39    | 100.0       | 9      | 1  | US-08-704-170-44  |
| 5          | 39    | 100.0       | 9      | 4  | US-09-454-204A-52 |
| 6          | 39    | 100.0       | 9      | 5  | PCT-US94-02631-44 |
| 7          | 39    | 100.0       | 11     | 2  | US-08-648-298-4   |
| 8          | 39    | 100.0       | 12     | 1  | US-08-704-170-52  |
| 9          | 39    | 100.0       | 12     | 1  | US-08-488-252-10  |
| 10         | 39    | 100.0       | 12     | 5  | PCT-US94-02631-52 |
| 11         | 39    | 100.0       | 12     | 5  | PCT-US95-03236-43 |
| 12         | 39    | 100.0       | 13     | 1  | US-08-090-148-5   |
| 13         | 39    | 100.0       | 13     | 1  | US-08-279-906A-17 |
| 14         | 39    | 100.0       | 14     | 1  | US-08-111-080-6   |
| 15         | 39    | 100.0       | 14     | 1  | US-08-211-980-6   |
| 16         | 39    | 100.0       | 14     | 2  | US-08-455-625-9   |
| 17         | 39    | 100.0       | 14     | 2  | US-08-455-625-10  |
| 18         | 39    | 100.0       | 14     | 3  | US-08-455-685-9   |
| 19         | 39    | 100.0       | 14     | 3  | US-08-455-685-10  |
| 20         | 39    | 100.0       | 14     | 3  | US-08-060-988A-9  |
| 21         | 39    | 100.0       | 14     | 5  | PCT-US92-07111-6  |
| 22         | 39    | 100.0       | 14     | 5  | PCT-US94-05142-9  |
| 23         | 39    | 100.0       | 14     | 5  | PCT-US94-05142-10 |
| 24         | 39    | 100.0       | 14     | 5  | PCT-US94-05142-11 |
| 25         | 39    | 100.0       | 15     | 1  | US-08-336-087-2   |
| 26         | 39    | 100.0       | 15     | 1  | US-08-218-025A-17 |
| 27         | 39    | 100.0       | 15     | 1  | US-08-218-025A-17 |

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| 28  | 39 | 100.0 | 15 | 1 | US-08-709-047-7   | Sequence 7, Appl  |
| 29  | 39 | 100.0 | 15 | 1 | US-08-479-400-2   | Sequence 2, Appl  |
| 30  | 39 | 100.0 | 15 | 1 | US-08-410-360-7   | Sequence 7, Appl  |
| 31  | 39 | 100.0 | 15 | 1 | US-08-095-332-1   | Sequence 1, Appl  |
| 32  | 39 | 100.0 | 15 | 1 | US-08-707-801A-7  | Sequence 7, Appl  |
| 33  | 39 | 100.0 | 15 | 1 | US-08-709-006-7   | Sequence 7, Appl  |
| 34  | 39 | 100.0 | 15 | 1 | US-08-711-175-7   | Sequence 7, Appl  |
| 35  | 39 | 100.0 | 15 | 1 | US-08-488-252-27  | Sequence 27, Appl |
| 36  | 39 | 100.0 | 15 | 2 | US-08-021-879-2   | Sequence 2, Appl  |
| 37  | 39 | 100.0 | 15 | 2 | US-07-760-530-1   | Sequence 1, Appl  |
| 38  | 39 | 100.0 | 15 | 2 | US-07-950-571A-3  | Sequence 3, Appl  |
| 39  | 39 | 100.0 | 15 | 2 | US-08-975-699-6   | Sequence 6, Appl  |
| 40  | 39 | 100.0 | 15 | 2 | US-08-972-089-6   | Sequence 6, Appl  |
| 41  | 39 | 100.0 | 15 | 2 | US-08-455-625-7   | Sequence 7, Appl  |
| 42  | 39 | 100.0 | 15 | 2 | US-08-455-625-11  | Sequence 11, Appl |
| 43  | 39 | 100.0 | 15 | 2 | US-08-455-625-12  | Sequence 12, Appl |
| 44  | 39 | 100.0 | 15 | 2 | US-08-455-625-13  | Sequence 13, Appl |
| 45  | 39 | 100.0 | 15 | 2 | US-08-455-625-14  | Sequence 14, Appl |
| 46  | 39 | 100.0 | 15 | 2 | US-08-455-625-15  | Sequence 15, Appl |
| 47  | 39 | 100.0 | 15 | 2 | US-08-395-204-2   | Sequence 2, Appl  |
| 48  | 39 | 100.0 | 15 | 2 | US-08-628-687-1   | Sequence 1, Appl  |
| 49  | 39 | 100.0 | 15 | 2 | US-07-847-311A-1  | Sequence 1, Appl  |
| 50  | 39 | 100.0 | 15 | 2 | US-08-986-234-13  | Sequence 13, Appl |
| 51  | 39 | 100.0 | 15 | 2 | US-08-986-234-28  | Sequence 28, Appl |
| 52  | 39 | 100.0 | 15 | 3 | US-08-492-076-22  | Sequence 22, Appl |
| 53  | 39 | 100.0 | 15 | 3 | US-08-493-071-25  | Sequence 25, Appl |
| 54  | 39 | 100.0 | 15 | 3 | US-08-480-332-1   | Sequence 1, Appl  |
| 55  | 39 | 100.0 | 15 | 3 | US-08-455-685-7   | Sequence 7, Appl  |
| 56  | 39 | 100.0 | 15 | 3 | US-08-455-685-11  | Sequence 11, Appl |
| 57  | 39 | 100.0 | 15 | 3 | US-08-455-685-12  | Sequence 12, Appl |
| 58  | 39 | 100.0 | 15 | 3 | US-08-455-685-13  | Sequence 13, Appl |
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| 60  | 39 | 100.0 | 15 | 3 | US-08-455-685-15  | Sequence 15, Appl |
| 61  | 39 | 100.0 | 15 | 3 | US-08-060-988A-7  | Sequence 7, Appl  |
| 62  | 39 | 100.0 | 15 | 3 | US-08-060-988A-11 | Sequence 11, Appl |
| 63  | 39 | 100.0 | 15 | 3 | US-08-060-988A-12 | Sequence 12, Appl |
| 64  | 39 | 100.0 | 15 | 3 | US-08-060-988A-13 | Sequence 13, Appl |
| 65  | 39 | 100.0 | 15 | 3 | US-08-060-988A-14 | Sequence 14, Appl |
| 66  | 39 | 100.0 | 15 | 3 | US-08-060-988A-15 | Sequence 15, Appl |
| 67  | 39 | 100.0 | 15 | 3 | US-09-051-006-8   | Sequence 8, Appl  |
| 68  | 39 | 100.0 | 15 | 4 | US-09-389-390-1   | Sequence 1, Appl  |
| 69  | 39 | 100.0 | 15 | 4 | US-09-508-552-15  | Sequence 15, Appl |
| 70  | 39 | 100.0 | 15 | 4 | US-09-827-688-9   | Sequence 9, Appl  |
| 71  | 39 | 100.0 | 15 | 5 | PCT-US92-10378-1  | Sequence 1, Appl  |
| 72  | 39 | 100.0 | 15 | 5 | PCT-US94-05142-7  | Sequence 7, Appl  |
| 73  | 39 | 100.0 | 15 | 5 | PCT-US94-05142-11 | Sequence 11, Appl |
| 74  | 39 | 100.0 | 15 | 5 | PCT-US94-05142-12 | Sequence 12, Appl |
| 75  | 39 | 100.0 | 15 | 5 | PCT-US94-05142-13 | Sequence 13, Appl |
| 76  | 39 | 100.0 | 15 | 5 | PCT-US94-05142-14 | Sequence 14, Appl |
| 77  | 39 | 100.0 | 15 | 5 | PCT-US94-05142-15 | Sequence 15, Appl |
| 78  | 39 | 100.0 | 16 | 2 | US-08-657-392-28  | Sequence 28, Appl |
| 79  | 39 | 100.0 | 16 | 2 | US-08-251-472-2   | Sequence 2, Appl  |
| 80  | 39 | 100.0 | 16 | 2 | US-08-481-905-35  | Sequence 35, Appl |
| 81  | 39 | 100.0 | 16 | 3 | US-08-481-985B-35 | Sequence 35, Appl |
| 82  | 39 | 100.0 | 16 | 3 | US-09-248-082-2   | Sequence 2, Appl  |
| 83  | 39 | 100.0 | 16 | 3 | US-08-370-476-35  | Sequence 35, Appl |
| 84  | 39 | 100.0 | 16 | 5 | PCT-US94-02533-28 | Sequence 28, Appl |
| 85  | 39 | 100.0 | 16 | 5 | PCT-US94-02533-28 | Sequence 28, Appl |
| 86  | 39 | 100.0 | 18 | 1 | US-08-015-770B-4  | Sequence 4, Appl  |
| 87  | 39 | 100.0 | 20 | 1 | US-08-121-054C-3  | Sequence 3, Appl  |
| 88  | 39 | 100.0 | 20 | 1 | US-08-488-252-28  | Sequence 28, Appl |
| 89  | 39 | 100.0 | 20 | 3 | US-08-539-436-3   | Sequence 3, Appl  |
| 90  | 39 | 100.0 | 20 | 4 | US-09-813-659-3   | Sequence 3, Appl  |
| 91  | 39 | 100.0 | 20 | 4 | US-09-549-067A-3  | Sequence 3, Appl  |
| 92  | 39 | 100.0 | 21 | 2 | US-08-452-503A-4  | Sequence 4, Appl  |
| 93  | 39 | 100.0 | 21 | 2 | US-08-453-745A-4  | Sequence 4, Appl  |
| 94  | 39 | 100.0 | 21 | 2 | US-08-470-419-25  | Sequence 25, Appl |
| 95  | 39 | 100.0 | 21 | 2 | US-08-648-298-18  | Sequence 18, Appl |
| 96  | 39 | 100.0 | 21 | 2 | US-08-761-828A-25 | Sequence 25, Appl |
| 97  | 39 | 100.0 | 21 | 2 | US-08-452-520B-4  | Sequence 4, Appl  |
| 98  | 39 | 100.0 | 21 | 2 | US-08-290-105-25  | Sequence 25, Appl |
| 99  | 39 | 100.0 | 21 | 3 | US-08-776-949-25  | Sequence 25, Appl |
| 100 | 39 | 100.0 | 21 | 3 | US-08-482-810-25  | Sequence 25, Appl |

|     |    |       |    |   |                    |                   |     |    |      |    |   |                     |                   |
|-----|----|-------|----|---|--------------------|-------------------|-----|----|------|----|---|---------------------|-------------------|
| 101 | 39 | 100.0 | 21 | 3 | US-09-027-955-25   | Sequence 25, Appl | 174 | 34 | 87.2 | 15 | 2 | US-08-455-625-21    | Sequence 21, Appl |
| 102 | 39 | 100.0 | 21 | 3 | US-09-636-805-25   | Sequence 25, Appl | 175 | 34 | 87.2 | 15 | 3 | US-08-455-685-16    | Sequence 16, Appl |
| 103 | 39 | 100.0 | 21 | 4 | US-09-258-128-25   | Sequence 25, Appl | 176 | 34 | 87.2 | 15 | 3 | US-08-455-685-19    | Sequence 19, Appl |
| 104 | 39 | 100.0 | 21 | 4 | US-09-635-754-25   | Sequence 25, Appl | 177 | 34 | 87.2 | 15 | 3 | US-08-455-685-20    | Sequence 20, Appl |
| 105 | 39 | 100.0 | 21 | 4 | US-08-680-525-25   | Sequence 25, Appl | 178 | 34 | 87.2 | 15 | 3 | US-08-455-685-21    | Sequence 21, Appl |
| 106 | 39 | 100.0 | 22 | 1 | US-09-636-223-25   | Sequence 25, Appl | 179 | 34 | 87.2 | 15 | 3 | US-08-060-988A-16   | Sequence 16, Appl |
| 107 | 39 | 100.0 | 22 | 1 | US-08-125-012-13   | Sequence 13, Appl | 180 | 34 | 87.2 | 15 | 3 | US-08-060-988A-19   | Sequence 19, Appl |
| 108 | 39 | 100.0 | 22 | 2 | US-08-783-818-13   | Sequence 13, Appl | 181 | 34 | 87.2 | 15 | 3 | US-08-060-988A-20   | Sequence 20, Appl |
| 109 | 39 | 100.0 | 22 | 2 | US-08-453-349-13   | Sequence 13, Appl | 182 | 34 | 87.2 | 15 | 3 | US-08-060-988A-21   | Sequence 21, Appl |
| 110 | 39 | 100.0 | 22 | 2 | US-08-345-321-2    | Sequence 2, Appl  | 183 | 34 | 87.2 | 15 | 5 | PCT-US94-02631-72   | Sequence 72, Appl |
| 111 | 39 | 100.0 | 22 | 2 | US-08-979-385B-11  | Sequence 11, Appl | 184 | 34 | 87.2 | 15 | 5 | PCT-US94-05142-19   | Sequence 19, Appl |
| 112 | 39 | 100.0 | 22 | 2 | US-08-537-245-1    | Sequence 5, Appl  | 185 | 34 | 87.2 | 15 | 5 | PCT-US94-05142-20   | Sequence 20, Appl |
| 113 | 39 | 100.0 | 22 | 3 | US-08-805-889-5    | Sequence 5, Appl  | 186 | 34 | 87.2 | 15 | 5 | PCT-US94-05142-21   | Sequence 21, Appl |
| 114 | 39 | 100.0 | 22 | 4 | US-09-070-291-5    | Sequence 5, Appl  | 187 | 34 | 87.2 | 15 | 5 | PCT-US94-05142-22   | Sequence 22, Appl |
| 115 | 39 | 100.0 | 22 | 4 | US-09-217-306B-22  | Sequence 22, Appl | 188 | 34 | 87.2 | 17 | 1 | US-08-257-528B-35   | Sequence 35, Appl |
| 116 | 39 | 100.0 | 22 | 4 | US-08-880-576-13   | Sequence 13, Appl | 189 | 34 | 87.2 | 17 | 1 | US-08-460-602A-35   | Sequence 35, Appl |
| 117 | 39 | 100.0 | 24 | 1 | US-08-097-751-1    | Sequence 1, Appl  | 190 | 34 | 87.2 | 17 | 1 | US-08-463-966A-35   | Sequence 35, Appl |
| 118 | 39 | 100.0 | 24 | 1 | US-08-090-148-6    | Sequence 6, Appl  | 191 | 34 | 87.2 | 17 | 1 | US-08-463-966A-35   | Sequence 35, Appl |
| 119 | 39 | 100.0 | 24 | 1 | US-08-257-528B-99  | Sequence 99, Appl | 192 | 34 | 87.2 | 17 | 2 | US-08-464-329A-35   | Sequence 35, Appl |
| 120 | 39 | 100.0 | 24 | 1 | US-08-460-602A-99  | Sequence 99, Appl | 193 | 34 | 87.2 | 17 | 2 | US-08-464-329A-35   | Sequence 35, Appl |
| 121 | 39 | 100.0 | 24 | 1 | US-08-463-966A-99  | Sequence 99, Appl | 194 | 34 | 87.2 | 17 | 2 | US-08-467-881A-35   | Sequence 35, Appl |
| 122 | 39 | 100.0 | 24 | 1 | US-08-463-966A-99  | Sequence 99, Appl | 195 | 34 | 87.2 | 17 | 5 | PCT-US92-0668B-13   | Sequence 13, Appl |
| 123 | 39 | 100.0 | 24 | 2 | US-08-464-329A-99  | Sequence 99, Appl | 196 | 34 | 87.2 | 15 | 2 | US-08-455-625-18    | Sequence 18, Appl |
| 124 | 39 | 100.0 | 24 | 2 | US-08-493-235-24   | Sequence 24, Appl | 197 | 34 | 84.6 | 15 | 3 | US-08-455-625-22    | Sequence 22, Appl |
| 125 | 39 | 100.0 | 24 | 2 | US-08-462-507A-99  | Sequence 99, Appl | 198 | 33 | 84.6 | 15 | 3 | US-08-455-685-18    | Sequence 18, Appl |
| 126 | 39 | 100.0 | 24 | 2 | US-08-146-028-160  | Sequence 160, App | 199 | 33 | 84.6 | 15 | 3 | US-08-455-685-22    | Sequence 22, Appl |
| 127 | 39 | 100.0 | 24 | 2 | US-08-467-881A-99  | Sequence 99, Appl | 200 | 33 | 84.6 | 15 | 3 | US-08-060-988A-18   | Sequence 18, Appl |
| 128 | 39 | 100.0 | 24 | 3 | US-08-723-425A-160 | Sequence 160, App | 201 | 33 | 84.6 | 15 | 3 | US-08-060-988A-22   | Sequence 22, Appl |
| 129 | 39 | 100.0 | 24 | 3 | US-08-480-332-2    | Sequence 2, Appl  | 202 | 33 | 84.6 | 15 | 5 | PCT-US94-05142-18   | Sequence 18, Appl |
| 130 | 39 | 100.0 | 24 | 3 | US-09-112-206-160  | Sequence 160, App | 203 | 33 | 84.6 | 15 | 5 | PCT-US94-05142-22   | Sequence 22, Appl |
| 131 | 39 | 100.0 | 24 | 4 | US-09-790-497A-14  | Sequence 14, Appl | 204 | 29 | 74.4 | 20 | 1 | US-08-257-528B-51   | Sequence 51, Appl |
| 132 | 39 | 100.0 | 24 | 4 | US-09-790-497A-160 | Sequence 160, App | 205 | 29 | 74.4 | 20 | 1 | US-08-460-602A-51   | Sequence 51, Appl |
| 133 | 39 | 100.0 | 24 | 4 | US-09-576-824A-160 | Sequence 160, App | 206 | 29 | 74.4 | 20 | 1 | US-08-463-966A-51   | Sequence 51, Appl |
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| 137 | 39 | 100.0 | 25 | 2 | US-07-950-571A-1   | Sequence 1, Appl  | 210 | 29 | 74.4 | 20 | 2 | US-09-820-48A-8     | Sequence 8, Appl  |
| 138 | 39 | 100.0 | 25 | 2 | US-08-266-448-1    | Sequence 1, Appl  | 211 | 28 | 71.8 | 10 | 4 | US-09-430-470-24    | Sequence 24, Appl |
| 139 | 39 | 100.0 | 25 | 3 | US-08-485-324-13   | Sequence 13, Appl | 212 | 28 | 71.8 | 10 | 4 | US-08-937-276A-5    | Sequence 5, Appl  |
| 140 | 39 | 100.0 | 25 | 3 | US-08-485-324-31   | Sequence 31, Appl | 213 | 28 | 71.8 | 10 | 4 | US-09-454-204A-51   | Sequence 51, Appl |
| 141 | 39 | 100.0 | 25 | 3 | US-08-447-506-13   | Sequence 13, Appl | 214 | 28 | 71.8 | 10 | 4 | US-09-454-204A-51   | Sequence 51, Appl |
| 142 | 39 | 100.0 | 25 | 3 | US-08-447-506-31   | Sequence 31, Appl | 215 | 28 | 71.8 | 10 | 4 | US-09-508-552-16    | Sequence 16, Appl |
| 143 | 39 | 100.0 | 25 | 3 | US-08-235-437-13   | Sequence 13, Appl | 216 | 28 | 71.8 | 10 | 4 | US-09-508-552-16    | Sequence 16, Appl |
| 144 | 39 | 100.0 | 25 | 3 | US-08-235-437-31   | Sequence 31, Appl | 217 | 28 | 71.8 | 13 | 2 | US-07-847-311A-20   | Sequence 20, Appl |
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| 147 | 39 | 100.0 | 25 | 4 | US-09-593-870A-31  | Sequence 31, Appl | 220 | 26 | 66.7 | 20 | 1 | US-08-279-906A-26   | Sequence 26, Appl |
| 148 | 39 | 89.7  | 15 | 2 | US-08-455-625-17   | Sequence 17, Appl | 221 | 26 | 66.7 | 23 | 4 | US-09-902-540-11814 | Sequence 11814, A |
| 149 | 35 | 89.7  | 15 | 2 | US-08-455-625-23   | Sequence 23, Appl | 222 | 26 | 64.1 | 15 | 2 | US-08-986-234-17    | Sequence 17, Appl |
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| 151 | 35 | 89.7  | 15 | 3 | US-08-455-685-23   | Sequence 23, Appl | 224 | 25 | 64.1 | 17 | 2 | US-08-661-479-16    | Sequence 16, Appl |
| 152 | 35 | 89.7  | 15 | 3 | US-08-060-988A-17  | Sequence 17, Appl | 225 | 25 | 64.1 | 18 | 1 | US-08-100-118-6     | Sequence 6, Appl  |
| 153 | 35 | 89.7  | 15 | 3 | US-08-060-988A-23  | Sequence 23, Appl | 226 | 25 | 64.1 | 19 | 1 | US-08-323-129D-51   | Sequence 51, Appl |
| 154 | 35 | 89.7  | 15 | 5 | PCT-US94-05142-17  | Sequence 17, Appl | 227 | 25 | 64.1 | 19 | 2 | US-08-975-693-15    | Sequence 15, Appl |
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| 156 | 35 | 89.7  | 19 | 1 | US-08-279-906A-19  | Sequence 19, Appl | 229 | 25 | 64.1 | 19 | 2 | US-08-972-089-15    | Sequence 15, Appl |
| 157 | 34 | 87.2  | 8  | 1 | US-08-704-170-51   | Sequence 51, Appl | 230 | 25 | 64.1 | 19 | 3 | US-08-363-276B-1    | Sequence 1, Appl  |
| 158 | 34 | 87.2  | 8  | 5 | PCT-US94-02631-51  | Sequence 51, Appl | 231 | 25 | 64.1 | 19 | 3 | US-08-755-034-1     | Sequence 1, Appl  |
| 159 | 34 | 87.2  | 8  | 5 | PCT-US95-03236-25  | Sequence 25, Appl | 232 | 25 | 64.1 | 19 | 5 | US-10-125-594-6     | Sequence 6, Appl  |
| 160 | 34 | 87.2  | 9  | 1 | US-08-704-170-38   | Sequence 38, Appl | 233 | 25 | 64.1 | 19 | 5 | PCT-US96-16718-1    | Sequence 1, Appl  |
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| 163 | 34 | 87.2  | 10 | 5 | PCT-US94-02631-71  | Sequence 71, Appl | 236 | 25 | 64.1 | 20 | 3 | US-08-825-852-63    | Sequence 63, Appl |
| 164 | 34 | 87.2  | 11 | 1 | US-08-704-170-73   | Sequence 73, Appl | 237 | 25 | 64.1 | 20 | 3 | US-08-825-852-64    | Sequence 64, Appl |
| 165 | 34 | 87.2  | 11 | 1 | US-08-704-170-74   | Sequence 74, Appl | 238 | 25 | 64.1 | 20 | 3 | US-09-052-888-64    | Sequence 64, Appl |
| 166 | 34 | 87.2  | 11 | 5 | PCT-US94-02631-73  | Sequence 73, Appl | 239 | 25 | 64.1 | 20 | 3 | US-09-052-888-65    | Sequence 65, Appl |
| 167 | 34 | 87.2  | 11 | 5 | PCT-US94-02631-74  | Sequence 74, Appl | 240 | 25 | 64.1 | 20 | 4 | US-09-723-890-64    | Sequence 64, Appl |
| 168 | 34 | 87.2  | 14 | 5 | PCT-US95-03236-23  | Sequence 23, Appl | 241 | 25 | 64.1 | 20 | 4 | US-09-723-890-65    | Sequence 65, Appl |
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| 170 | 34 | 87.2  | 15 | 1 | US-08-704-170-72   | Sequence 72, Appl | 243 | 25 | 64.1 | 20 | 4 | US-09-723-901-65    | Sequence 65, Appl |
| 171 | 34 | 87.2  | 15 | 2 | US-08-455-625-16   | Sequence 16, Appl | 244 | 25 | 64.1 | 20 | 4 | US-09-723-547-64    | Sequence 64, Appl |
| 172 | 34 | 87.2  | 15 | 2 | US-08-455-625-19   | Sequence 19, Appl | 245 | 25 | 64.1 | 20 | 4 | US-09-724-127-64    | Sequence 64, Appl |
| 173 | 34 | 87.2  | 15 | 2 | US-08-455-625-20   | Sequence 20, Appl | 246 | 25 | 64.1 | 20 | 4 | US-09-724-127-65    | Sequence 65, Appl |

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| 247 | 25 | 64.1 | 20 | 4 | US-09-723-911-64 | Sequence 64, Appl |
| 248 | 25 | 64.1 | 20 | 4 | US-09-723-931-65 | Sequence 65, Appl |
| 249 | 25 | 64.1 | 20 | 4 | US-09-723-873-64 | Sequence 64, Appl |
| 250 | 25 | 64.1 | 20 | 4 | US-09-723-873-65 | Sequence 65, Appl |

## ALIGNMENTS

RESULT 1  
US-08-260-086-6  
; Sequence 6, Application US/08260086  
; Patent No. 5622933  
; GENERAL INFORMATION:  
; APPLICANT: SABATIER, JEAN M  
; APPLICANT: BENOUD, ABDELAZIZ  
; APPLICANT: YAH, NOUARA  
; APPLICANT: FENCUILLET, EMMANUEL  
; APPLICANT: MABROUK, KAMEL  
; APPLICANT: GLUCKMAN, JEAN-CLAUDE  
; APPLICANT: VAN RIETSCHOTEN, JURPHAA  
; APPLICANT: ROCHAT, HERVE  
; TITLE OF INVENTION: MULTIPLE BRANCH PEPTIDE CONSTRUCTIONS  
; TITLE OF INVENTION: FOR USE AGAINST HIV  
; NUMBER OF SEQUENCES: 7  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: WEIL, GOTSCHAL & MANGES  
; STREET: 2882 SAND HILL ROAD  
; CITY: MENLO PARK  
; STATE: CALIFORNIA  
; COUNTRY: USA  
; ZIP: 94025  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/260,086  
; FILING DATE: 15-JUN-1994  
; CLASSIFICATION: 514  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: GB 9318901.7  
; FILING DATE: 13-SEP-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: RAE-VENTER, BARBARA  
; REGISTRATION NUMBER: 32,750  
; REFERENCE/DOCKET NUMBER: 37965.0007  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 926-6200  
; TELEFAX: (415) 854-3713  
; INFORMATION FOR SEQ ID NO: 6:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 8 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; US-08-260-086-6

Query Match 100.0%; Score 39; DB 1; Length 8;  
Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
Db 1 RAFTYICK 8

RESULT 2  
US-08-480-332-3  
; Sequence 3, Application US/08480332  
; Patent No. 6180134  
; GENERAL INFORMATION:

APPLICANT: Zalipsky, Samuel; Woodde, Martin; Martin, Francis;  
APPLICANT: Barenholz, Yecheskel  
TITLE OF INVENTION: Enhanced Circulation Effector Composition and  
TITLE OF INVENTION: Method  
NUMBER OF SEQUENCES: 10  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Dehlinger & Associates  
STREET: 350 Cambridge Avenue, Suite 250  
CITY: Palo Alto  
STATE: CA  
COUNTRY: USA  
ZIP: 94306  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/480,332  
FILING DATE: 7-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/316,436  
FILING DATE: 29-SEP-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/035,443  
FILING DATE: 23-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Mohr, Judy M.  
REGISTRATION NUMBER: 38,563  
REFERENCE/DOCKET NUMBER: 5325-0115.31  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 324-0860  
TELEFAX: (415) 324-0960  
INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 8 amino acids  
TYPE: amino acid  
STRANDEDNESS: unknown  
TOPOLOGY: unknown  
MOLECULE TYPE: peptide  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
INDIVIDUAL ISOLATE: Peptide 3, Fig. 13  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 1..15  
US-08-480-332-3

Query Match 100.0%; Score 39; DB 3; Length 8;  
Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
Db 1 RAFTYICK 8

RESULT 3  
PCT-US92-10378-5  
; Sequence 5, Application PC/TUS9210378  
; GENERAL INFORMATION:  
; APPLICANT: BOARD OF REGENTS, THE UNIVERSITY OF  
; APPLICANT: TEXAS SYSTEM  
; APPLICANT: SASTRY, Jagannatha K.  
; APPLICANT: ARLINGHAUS, Ralph B.  
; APPLICANT: PLATSOUAS, Chris D.  
; APPLICANT: NEHETE, Pramod N.  
; TITLE OF INVENTION: METHODS AND COMPOSITIONS  
; TITLE OF INVENTION: FOR ELICITING IMMUNE OR ANTI-INFECTION RESPONSES  
; NUMBER OF SEQUENCES: 7  
; CORRESPONDENCE ADDRESS:

ADDRESSEE: Arnold, White & Durkee  
 STREET: P.O. Box 4433  
 CITY: Houston  
 STATE: Texas  
 COUNTRY: US  
 ZIP: 77210

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: WordPerfect 5.1

CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: PCT/US92/10378  
 FILING DATE: 19921202

CLASSIFICATION:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 07/800,932  
 FILING DATE: December 2, 1991

PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 07/945865  
 FILING DATE: September 16, 1992

ATTORNEY/AGENT INFORMATION:  
 NAME: Parker, David L.  
 REGISTRATION NUMBER: 32,165  
 REFERENCE/DOCKET NUMBER: UTFC305PCT

TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 512-320-7200  
 TELEFAX: 512-474-7577

TELEX: Not Applicable  
 INFORMATION FOR SEQ ID NO: 5:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 8 amino acids  
 TYPE: AMINO ACID  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: peptide  
 PCT-US92-10378-5

Query Match  
 Best Local Similarity 100.0%; Score 39; DB 5; Length 8;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTVIGK 8  
 Db 1 RAFTVIGK 8

RESULT 4  
 US-08-704-170-44  
 Sequence 44, Application US/08704170  
 Patent No. 5707626

GENERAL INFORMATION:  
 APPLICANT: Douvas, Angelina  
 APPLICANT: Ehsessman, Yohsi  
 APPLICANT: Ehsessman, Yohsi  
 TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
 TITLE OF INVENTION: IMMUNOINFECTION CLUSTER VIRUS INFECTIONS  
 NUMBER OF SEQUENCES: 121

CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Robbins, Berline & Carson  
 STREET: 201 No. 5707626th Figueroa Street, Suite 500  
 CITY: Los Angeles  
 STATE: California  
 COUNTRY: U.S.A.  
 ZIP: 90012

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/704,170  
 FILING DATE:

CLASSIFICATION: 424  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/029,850  
 FILING DATE: 11-MAR-1993  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Spitals, John P.  
 REGISTRATION NUMBER: 29,215  
 REFERENCE/DOCKET NUMBER: 1920-331

TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (213) 977-1001  
 TELEFAX: (213) 977-1003

INFORMATION FOR SEQ ID NO: 44:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 9 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: peptide  
 US-08-704-170-44

Query Match  
 Best Local Similarity 100.0%; Score 39; DB 1; Length 9;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTVIGK 8  
 Db 2 RAFTVIGK 9

RESULT 5  
 US-09-454-204A-52  
 Sequence 52, Application US/09454204A  
 Patent No. 6663871

GENERAL INFORMATION:  
 APPLICANT: McMichael, Andrew  
 APPLICANT: Hill, Adrian V.S.  
 APPLICANT: Gilbert, Sarah C.  
 APPLICANT: Schneider, Jorg  
 APPLICANT: Plebanski, Magdalena  
 APPLICANT: Hanke, Tomas  
 APPLICANT: Smith, Geoffrey L.

APPLICANT: Blanchard, Tom  
 TITLE OF INVENTION: Methods and Reagents for Vaccination  
 TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response  
 FILE REFERENCE: 2907.1000-000  
 CURRENT APPLICATION NUMBER: US/09/454,204A  
 PRIOR FILING DATE: 1998-06-09  
 PRIOR APPLICATION NUMBER: PCT/GB98/01681  
 PRIOR FILING DATE: 1997-06-09  
 PRIOR APPLICATION NUMBER: GB 97 11957.2  
 NUMBER OF SEQ ID NOS: 78  
 SOFTWARE: FastSeq for Windows Version 4.0  
 SEQ ID NO 52  
 LENGTH: 9  
 TYPE: PRT  
 ORGANISM: Unknown

FEATURE:  
 OTHER INFORMATION: CTL Epitope of HIV-1 gp120  
 US-09-454-204A-52

Query Match  
 Best Local Similarity 100.0%; Score 39; DB 4; Length 9;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTVIGK 8  
 Db 2 RAFTVIGK 9

RESULT 6  
 PCT-US94-02631-44  
 Sequence 44, Application PC/TUS9402631  
 GENERAL INFORMATION:

APPLICANT: Douvas, Angelina  
ATTORNEY/AGENT INFORMATION:  
NAME: Takehana, Yoshi  
REGISTRATION NUMBER: 38,475  
REFERENCE/DOCKET NUMBER: 4035/08865  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212527700  
TELEFAX: 2127536237  
TELEX: 236687  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 11 amino acids  
TYPE: peptide  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: Homo sapiens  
IMMEDIATE SOURCE:  
CLONE: HIV gp120  
US-08-648-298-4

CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Green, Reza  
REGISTRATION NUMBER: 38,475  
REFERENCE/DOCKET NUMBER: 4035/08865  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212527700  
TELEFAX: 2127536237  
TELEX: 236687  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 11 amino acids  
TYPE: peptide  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: Homo sapiens  
IMMEDIATE SOURCE:  
CLONE: HIV gp120  
US-08-648-298-4

Query Match 100.0%; Score 39; DB 2; Length 11;  
Best Local Similarity 100.0%; Pred. No. 0.053;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFTTIGK 8  
DB 2 RAFTTIGK 9

RESULT 7  
US-08-648-298-4  
Sequence 4, Application US/08648298  
Patent No. 5871990  
GENERAL INFORMATION:  
APPLICANT: Henrik Claussen  
TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
IMMUNOINFECTION CLUSTER VIRUS INFECTIONS  
NUMBER OF SEQUENCES: 121  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Robbins, Berliner & Carson  
STREET: 201 North Figueroa Street, Suite 500  
CITY: Los Angeles  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 90012  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/02631  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/029,850  
FILING DATE: 11-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Spitalis, John P.  
REGISTRATION NUMBER: 29,215  
REFERENCE/DOCKET NUMBER: 1920-331  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 977-1001  
TELEFAX: (213) 977-1003  
INFORMATION FOR SEQ ID NO: 44:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 9 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
PCT-US94-02631-44

Query Match 100.0%; Score 39; DB 5; Length 9;  
Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFTTIGK 8  
DB 2 RAFTTIGK 9

RESULT 7  
US-08-648-298-4  
Sequence 4, Application US/08648298  
Patent No. 5871990  
GENERAL INFORMATION:  
APPLICANT: Henrik Claussen  
TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
IMMUNOINFECTION CLUSTER VIRUS INFECTIONS  
NUMBER OF SEQUENCES: 121  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Robbins, Berliner & Carson  
STREET: 201 North Figueroa Street, Suite 500  
CITY: Los Angeles  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 90012  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/02631  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/029,850  
FILING DATE: 11-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Spitalis, John P.  
REGISTRATION NUMBER: 29,215  
REFERENCE/DOCKET NUMBER: 1920-331  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 977-1001  
TELEFAX: (213) 977-1003  
INFORMATION FOR SEQ ID NO: 52:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 12 amino acids  
TYPE: amino acid  
TOPOLOGY: linear

CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Green, Reza  
REGISTRATION NUMBER: 38,475  
REFERENCE/DOCKET NUMBER: 4035/08865  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212527700  
TELEFAX: 2127536237  
TELEX: 236687  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 11 amino acids  
TYPE: peptide  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: Homo sapiens  
IMMEDIATE SOURCE:  
CLONE: HIV gp120  
US-08-648-298-4

Query Match 100.0%; Score 39; DB 2; Length 11;  
Best Local Similarity 100.0%; Pred. No. 0.053;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFTTIGK 8  
DB 2 RAFTTIGK 9

RESULT 8  
US-08-704-170-52  
Sequence 52, Application US/08704170  
Patent No. 5707626  
GENERAL INFORMATION:  
APPLICANT: Douvas, Angelina  
ATTORNEY/AGENT INFORMATION:  
NAME: Takehana, Yoshi  
REGISTRATION NUMBER: 38,475  
REFERENCE/DOCKET NUMBER: 4035/08865  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212527700  
TELEFAX: 2127536237  
TELEX: 236687  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 11 amino acids  
TYPE: peptide  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: Homo sapiens  
IMMEDIATE SOURCE:  
CLONE: HIV gp120  
US-08-648-298-4

Query Match 100.0%; Score 39; DB 2; Length 11;  
Best Local Similarity 100.0%; Pred. No. 0.053;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFTTIGK 8  
DB 2 RAFTTIGK 9

RESULT 8  
US-08-704-170-52  
Sequence 52, Application US/08704170  
Patent No. 5707626  
GENERAL INFORMATION:  
APPLICANT: Douvas, Angelina  
ATTORNEY/AGENT INFORMATION:  
NAME: Takehana, Yoshi  
REGISTRATION NUMBER: 38,475  
REFERENCE/DOCKET NUMBER: 4035/08865  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212527700  
TELEFAX: 2127536237  
TELEX: 236687  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 11 amino acids  
TYPE: peptide  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: Homo sapiens  
IMMEDIATE SOURCE:  
CLONE: HIV gp120  
US-08-648-298-4

Query Match 100.0%; Score 39; DB 2; Length 11;  
Best Local Similarity 100.0%; Pred. No. 0.053;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFTTIGK 8  
DB 2 RAFTTIGK 9

RESULT 8  
US-08-704-170-52  
Sequence 52, Application US/08704170  
Patent No. 5707626  
GENERAL INFORMATION:  
APPLICANT: Douvas, Angelina  
ATTORNEY/AGENT INFORMATION:  
NAME: Takehana, Yoshi  
REGISTRATION NUMBER: 38,475  
REFERENCE/DOCKET NUMBER: 4035/08865  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212527700  
TELEFAX: 2127536237  
TELEX: 236687  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 11 amino acids  
TYPE: peptide  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: Homo sapiens  
IMMEDIATE SOURCE:  
CLONE: HIV gp120  
US-08-648-298-4

MOLECULE TYPE: peptide  
US-08-704-170-52

Query Match 100.0%; Score 39; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 0.058;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVITIGK 8  
DB 5 RAFVITIGK 12

RESULT 9  
US-08-488-252-30  
Sequence 30, Application US/08488252  
Patent No. 5763160

GENERAL INFORMATION:  
APPLICANT: Chang Yi Wang  
TITLE OF INVENTION: SYNTHETIC PEPTIDES AND PROCESS  
TITLE OF INVENTION: OF USING SAME FOR THE DETECTION OF ANTIBODIES TO  
TITLE OF INVENTION: HUMAN IMMUNODEFICIENCY VIRUS (HIV) GP120 ENVELOPE  
TITLE OF INVENTION: PROTEIN, DIAGNOSIS OF AIDS AND PRE-AIDS CONDITIONS  
NUMBER OF SEQUENCES: 38  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: MORGAN & PINNEGAN  
STREET: 345 PARK AVE.  
CITY: NEW YORK  
STATE: NEW YORK  
COUNTRY: USA  
ZIP: 10154

COMPUTER READABLE FORM:  
MEDIUM TYPE: FLOPPY DISK  
COMPUTER: IBM PC COMPATIBLE  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: WORDPERFECT 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/488,252  
FILING DATE:

CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/326,676  
FILING DATE: 07-Jun-1995  
APPLICATION NUMBER: 07/726,605  
FILING DATE: 09-Jul-1991  
APPLICATION NUMBER: 07/663,262  
FILING DATE: 01-Mar-1991  
APPLICATION NUMBER: 07/155,321  
FILING DATE: 12-Feb-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Maria C. H. Lin  
REGISTRATION NUMBER: 29,323  
REFERENCE/DOCKET NUMBER: 1151-4004 USA  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212-758-4800  
TELEFAX: (212) 751-6849  
TELEX: 421792

INFORMATION FOR SEQ ID NO: 30:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 12 amino acids  
TYPE: Amino acids  
STRANDEDNESS:  
TOPOLOGY: Unknown  
US-08-488-252-30

Query Match 100.0%; Score 39; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 0.058;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVITIGK 8  
DB 5 RAFVITIGK 12

RESULT 10  
PCT-US94-02631-52  
Sequence 52, Application PC/TUS9402631  
GENERAL INFORMATION:

APPLICANT: Douvas, Angelina  
APPLICANT: Takenawa, Yoshi  
APPLICANT: Ehresmann, Glenn  
TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
TITLE OF INVENTION: IMMUNOINFECTION CLUSTER VIRUS INFECTIONS  
NUMBER OF SEQUENCES: 121  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Robbins, Berliner & Carson  
STREET: 201 North Figueroa Street, Suite 500  
CITY: Los Angeles  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 90012

COMPUTER READABLE FORM:

MEDIUM TYPE: FLOPPY disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/02631  
FILING DATE:

CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/029,850  
FILING DATE: 11-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Spitalis, John P.  
REGISTRATION NUMBER: 29,215  
REFERENCE/DOCKET NUMBER: 1920-331  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 977-1001  
TELEFAX: (213) 977-1003

INFORMATION FOR SEQ ID NO: 52:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 12 amino acids  
TYPE: amino acid  
TOPOLOGY: linear

MOLECULE TYPE: peptide  
PCT-US94-02631-52

Query Match 100.0%; Score 39; DB 5; Length 12;  
Best Local Similarity 100.0%; Pred. No. 0.058;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVITIGK 8  
DB 5 RAFVITIGK 12

RESULT 11  
PCT-US95-03236-43  
Sequence 43, Application PC/TUS9503236  
GENERAL INFORMATION:

APPLICANT: University of Southern California  
TITLE OF INVENTION: Methods to Diagnose and Treat HIV-1  
TITLE OF INVENTION: Infection  
NUMBER OF SEQUENCES: 66  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Campbell and Flores  
STREET: 4370 La Jolla Village Drive, Suite 700  
CITY: San Diego  
STATE: California  
COUNTRY: USA  
ZIP: 92122

COMPUTER READABLE FORM:  
MEDIUM TYPE: FLOPPY disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/03236  
FILING DATE: 13-MAR-1995  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Imbira, Richard J.  
REGISTRATION NUMBER: 37,643  
REFERENCE/DOCKET NUMBER: RP-SI 1394  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (619) 535-9001  
TELEFAX: (619) 535-8949  
INFORMATION FOR SEQ ID NO: 43:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 12 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
PCT-US95-03236-43

Query Match 100.0%; Score 39; DB 5; Length 12;  
Best Local Similarity 100.0%; Pred. No. 0.058;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
DB 5 RAFVTIGK 12

RESULT 12  
US-08-090-148-5  
Sequence 5, Application US/08090148  
Patent No. 5534257  
GENERAL INFORMATION:  
APPLICANT: Maestico, Robert Allan  
APPLICANT: Stockley, Peter George  
APPLICANT: Talbot, Simon John  
TITLE OF INVENTION: Antigen-Presenting Capsid with  
TITLE OF INVENTION: Fusion MS2-coat Protein  
NUMBER OF SEQUENCES: 6  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Roseman & Colin  
STREET: 575 Madison Avenue  
CITY: New York  
STATE: NY  
COUNTRY: U.S.A.  
ZIP: 10022-2585  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.5", 1.44MB  
COMPUTER: IBM PS2-486  
OPERATING SYSTEM: MS-DOS  
SOFTWARE: WordPerfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/090,148  
FILING DATE: 08/11/93  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: GB 9101550.3  
FILING DATE: 01/24/91  
APPLICATION NUMBER: PCT/GB92/00124  
FILING DATE: 01/22/92  
ATTORNEY/AGENT INFORMATION:  
NAME: Nissenbaum, Israel  
REGISTRATION NUMBER: 27,582  
REFERENCE/DOCKET NUMBER:  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 940-6636  
TELEFAX: (212) 940-6404  
INFORMATION FOR SEQ ID NO: 5:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 13 AMINO ACIDS  
TYPE: AMINO ACID  
TOPOLOGY: NOT RELEVANT

MOLECULE TYPE: PEPTIDE  
US-08-090-148-5

Query Match 100.0%; Score 39; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 0.063;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
DB 4 RAFVTIGK 11

RESULT 13  
US-08-279-906A-17  
Sequence 17, Application US/08279906A  
Patent No. 5618922  
GENERAL INFORMATION:  
APPLICANT: Ohno, Tsuneya  
APPLICANT: Terada, Masaki  
APPLICANT: Yoneda, Yukio  
TITLE OF INVENTION: NM03 Antibody Materials and Methods  
NUMBER OF SEQUENCES: 27  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &  
ADDRESSER: Borum  
STREET: 6300 Sears Tower, 233 S. Wacker Drive  
CITY: Chicago  
STATE: Illinois  
COUNTRY: USA  
ZIP: 60606  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/279,906A  
FILING DATE:  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: No. 5618922and, Greta E.  
REGISTRATION NUMBER: 35,302  
REFERENCE/DOCKET NUMBER: 32028  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (312) 474-6300  
TELEFAX: (312) 474-0448  
INFORMATION FOR SEQ ID NO: 17:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 13 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-279-906A-17

Query Match 100.0%; Score 39; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 0.063;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
DB 6 RAFVTIGK 13

RESULT 14  
US-08-111-080-6  
Sequence 6, Application 08/111080  
Patent No. 5558665  
GENERAL INFORMATION:  
APPLICANT: Ohno, Tsuneya  
TITLE OF INVENTION: HIV Immunotherapeutics  
NUMBER OF SEQUENCES: 38  
CORRESPONDENCE ADDRESS:

ADDRESSER: Marshall, O'Toole, Gerstein, Murray &  
ADDRESSEE: Borun  
STREET: 6300 Sears Tower, 233 S. Wacker Drive  
CITY: Chicago  
STATE: Illinois  
COUNTRY: USA  
ZIP: 60606  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: 08/111,080  
FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/748,562  
FILING DATE: 22-AUG-1991  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: PCT/US92/07111  
FILING DATE: 24-AUG-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/039,457  
FILING DATE: 22-APR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Borun, Michael F.  
REGISTRATION NUMBER: 25,447  
REFERENCE/DOCKET NUMBER: 31629  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (312) 474-6300  
TELEFAX: (312) 474-0448  
TELEX: 25-3856  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-111-080-6

Query Match 100.0%; Score 39; DB 1; Length 14;  
Best Local Similarity 100.0%; Pred. NO. 0.068;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVITIG 8  
Db 7 RAFVITIG 14

RESULT 15  
US-08-211-980-6  
Sequence 6, Application US/08211980  
Patent No. 5665569  
GENERAL INFORMATION:  
APPLICANT: Ohno, Tsuneya  
TITLE OF INVENTION: HIV Immunotherapeutics  
NUMBER OF SEQUENCES: 38  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &  
STREET: 6300 Sears Tower, 233 S. Wacker Drive  
CITY: Chicago  
STATE: Illinois  
COUNTRY: USA  
ZIP: 60606  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/211,980

FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: PCT/US92/07111  
FILING DATE: 24-AUG-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/039,457  
FILING DATE: 22-APR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Borun, Michael F.  
REGISTRATION NUMBER: 25,447  
REFERENCE/DOCKET NUMBER: 31629  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (312) 474-6300  
TELEFAX: (312) 474-0448  
TELEX: 25-3856  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-211-980-6

Query Match 100.0%; Score 39; DB 1; Length 14;  
Best Local Similarity 100.0%; Pred. NO. 0.068;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVITIG 8  
Db 7 RAFVITIG 14

RESULT 16  
US-08-455-625-9  
Sequence 9, Application US/08455625  
Patent No. 5932218  
GENERAL INFORMATION:  
APPLICANT: Betzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. D.  
APPLICANT: Nara, Peter  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AGAINST HIV  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,625  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050



INFORMATION FOR SEQ ID NO: 9:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..14  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "p18-1, see Table V"  
US-08-455-625-9

Query Match 100.0%; Score 39; DB 2; Length 14;  
Best Local Similarity 100.0%; Pred. No. 0.068;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTICK 8  
Db 7 RAFTICK 14

RESULT 17  
US-08-455-625-10  
Sequence 10, Application US/08455625  
Patent No. 5932218  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. D.  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455.625  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 10:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..14

OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "p18-2, see Table V"  
US-08-455-625-10

Query Match 100.0%; Score 39; DB 2; Length 14;  
Best Local Similarity 100.0%; Pred. No. 0.068;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTICK 8  
Db 7 RAFTICK 14

RESULT 18  
US-08-455-685-9  
Sequence 9, Application US/08455685  
Patent No. 6214347  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 40  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455.685  
FILING DATE: 31-MAY-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/060,988  
FILING DATE: 14-MAY-1993  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,632  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022003  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 9:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-455-685-9

Query Match 100.0%; Score 39; DB 3; Length 14;  
Best Local Similarity 100.0%; Pred. No. 0.068;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTICK 8  
Db 7 RAFTICK 14

Db 7 RAFVTIGK 14

RESULT 19

US-08-455-685-10

Sequence 10, Application US/08455685

Patent No. 6214347

GENERAL INFORMATION:

APPLICANT: Berzofsky, Jay A.

APPLICANT: Ahlers, Jeffrey D.

APPLICANT: Pendleton, C. David

APPLICANT: Nara, Peter

APPLICANT: Shirai, Mutsunori

TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT

TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND

TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1

NUMBER OF SEQUENCES: 40

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson P.C.

STREET: 225 Franklin Street

CITY: Boston

STATE: MA

COUNTRY: US

ZIP: 02110-2804

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: Windows95

SOFTWARE: FASTSEQ for Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/455.685

FILING DATE: 31-MAY-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/060.988

FILING DATE: 14-MAY-1993

APPLICATION NUMBER: 07/847.311

FILING DATE: 06-MAR-1992

APPLICATION NUMBER: 07/751.998

FILING DATE: 29-AUG-1991

APPLICATION NUMBER: 07/148.692

FILING DATE: 26-JAN-1988

ATTORNEY/AGENT INFORMATION:

NAME: Beattie, Ingrid A.

REGISTRATION NUMBER: P-42.306

REFERENCE/DOCKET NUMBER: 08830/022003

TELECOMMUNICATION INFORMATION:

TELEPHONE: 617/542-8906

TELEFAX: 617/542-5070

TELEX: 200154

INFORMATION FOR SEQ ID NO: 10:

SEQUENCE CHARACTERISTICS:

LENGTH: 14 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-455-685-10

Query Match 100.0%; Score 39; DB 3; Length 14;

Best Local Similarity 100.0%; Pred. No. 0.068;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8

Db 7 RAFVTIGK 14

RESULT 20

US-08-060-988A-9

Sequence 9, Application US/08060988A

Patent No. 6294322

GENERAL INFORMATION:

APPLICANT: Berzofsky, Jay A.

APPLICANT: Ahlers, Jeffrey D.

APPLICANT: Pendleton, C. David

APPLICANT: Nara, Peter

APPLICANT: Shirai, Mutsunori

TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES

TITLE OF INVENTION: THAT ELICIT

TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND

TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1

NUMBER OF SEQUENCES: 48

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson P.C.

STREET: 225 Franklin Street

CITY: Boston

STATE: MA

COUNTRY: US

ZIP: 02110-2804

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: Windows95

SOFTWARE: FASTSEQ for Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/060.988A

FILING DATE: 14-MAY-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/847.311

FILING DATE: 06-MAR-1992

APPLICATION NUMBER: 07/751.998

FILING DATE: 29-AUG-1991

APPLICATION NUMBER: 07/148.692

FILING DATE: 26-JAN-1988

ATTORNEY/AGENT INFORMATION:

NAME: Beattie, Ingrid A.

REGISTRATION NUMBER: P-42.306

REFERENCE/DOCKET NUMBER: 08830/022001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 617/542-5070

TELEFAX: 617/542-8906

TELEX: 200154

INFORMATION FOR SEQ ID NO: 9:

SEQUENCE CHARACTERISTICS:

LENGTH: 14 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-060-988A-9

Query Match 100.0%; Score 39; DB 3; Length 14;

Best Local Similarity 100.0%; Pred. No. 0.068;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8

Db 7 RAFVTIGK 14

RESULT 21

US-08-060-988A-10

Sequence 10, Application US/08060988A

Patent No. 6294322

GENERAL INFORMATION:

APPLICANT: Berzofsky, Jay A.

APPLICANT: Ahlers, Jeffrey D.

APPLICANT: Pendleton, C. David

APPLICANT: Nara, Peter

APPLICANT: Shirai, Mutsunori

TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES

TITLE OF INVENTION: THAT ELICIT

TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND

TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1

NUMBER OF SEQUENCES: 48

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson P.C.

STREET: 225 Franklin Street

CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: Fastseq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/060,988A  
FILING DATE: 14-MAY-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 10:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-060-988A-10

Query Match 100.0%; Score 39; DB 3; Length 14;  
Best Local Similarity 100.0%; Pred. No. 0.068;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
Db 7 RAFVTIGK 14

RESULT 22  
PCT-US92-07111-6  
Sequence 6, Application PC/TUS9207111  
GENERAL INFORMATION:  
APPLICANT: Ohio, Tsuneya  
TITLE OF INVENTION: HIV Immunotherapeutics  
NUMBER OF SEQUENCES: 17  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &  
ADDRESSEE: Bicknell  
STREET: Two First National Plaza, 20 South Clark  
STREET: Street  
CITY: Chicago  
STATE: Illinois  
COUNTRY: USA  
ZIP: 60603  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US92/07111  
FILING DATE: 19920824  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/748,562  
FILING DATE: 22-AUG-1991  
ATTORNEY/AGENT INFORMATION:

NAME: Noland, Greta B.  
REGISTRATION NUMBER: 35,302  
REFERENCE/DOCKET NUMBER: 31016  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (312) 346-5750  
TELEFAX: (312) 984-9740  
TELEX: 25-3856  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 amino acids  
TYPE: AMINO ACID  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
PCT-US92-07111-6

Query Match 100.0%; Score 39; DB 5; Length 14;  
Best Local Similarity 100.0%; Pred. No. 0.068;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
Db 7 RAFVTIGK 14

RESULT 23  
PCT-US93-07967-6  
Sequence 6, Application PC/TUS9307967  
GENERAL INFORMATION:  
APPLICANT: Ohio, Tsuneya  
TITLE OF INVENTION: HIV Immunotherapeutics  
NUMBER OF SEQUENCES: 38  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &  
ADDRESSEE: Borun  
STREET: 6300 Sears Tower, 233 S. Wacker Drive  
CITY: Chicago  
STATE: Illinois  
COUNTRY: USA  
ZIP: 60606  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US93/07967  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: PCT/US92/07111  
FILING DATE: 24-AUG-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/039,457  
FILING DATE: 22-APR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Borun, Michael F.  
REGISTRATION NUMBER: 25,447  
REFERENCE/DOCKET NUMBER: 31629  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (312) 474-6300  
TELEFAX: (312) 474-0448  
TELEX: 25-3856  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
PCT-US93-07967-6

Query Match 100.0%; Score 39; DB 5; Length 14;  
Best Local Similarity 100.0%; Pred. No. 0.068;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTTIGK 8  
Db 7 RAFTTIGK 14

RESULT 24  
PCT-US94-05142-9  
Sequence 9, Application PC/TUS9405142  
GENERAL INFORMATION:  
APPLICANT:  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/05142  
FILING DATE: 13-MAY-1994  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 9:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..14  
OTHER INFORMATION: /label=peptide  
OTHER INFORMATION: /note="p18-1, see Table v"  
PCT-US94-05142-9

Query Match 100.0%; Score 39; DB 5; Length 14;  
Best Local Similarity 100.0%; Pred. No. 0.068;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTTIGK 8  
Db 7 RAFTTIGK 14

RESULT 25  
PCT-US94-05142-10  
Sequence 10, Application PC/TUS9405142  
GENERAL INFORMATION:  
APPLICANT:  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
NUMBER OF SEQUENCES: 36

CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/05142  
FILING DATE: 13-MAY-1994  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 10:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..14  
OTHER INFORMATION: /label=peptide  
OTHER INFORMATION: /note="p18-2, see Table v"  
PCT-US94-05142-10

Query Match 100.0%; Score 39; DB 5; Length 14;  
Best Local Similarity 100.0%; Pred. No. 0.068;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTTIGK 8  
Db 7 RAFTTIGK 14

RESULT 26  
US-08-336-087-2  
Sequence 2, Application US/08336087  
Patent No. 5503829  
GENERAL INFORMATION:  
APPLICANT: Ladant, Daniel  
APPLICANT: Leclerc, Claude  
APPLICANT: Sebo, Peter  
APPLICANT: Ullmann, Agnes  
TITLE OF INVENTION: Recombinant Mutants for Inducing  
TITLE OF INVENTION: Specific Immune Responses  
NUMBER OF SEQUENCES: 7  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Finnegan, Henderson, Faradow, Garrett &  
ADDRESSEE: Dunner  
STREET: 1300 I Street, N.W.  
CITY: Washington  
STATE: D.C.  
COUNTRY: USA  
ZIP: 20005-3315  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/336,087  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/011,644  
FILING DATE: 29-JAN-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Meyers, Kenneth J.  
REGISTRATION NUMBER: 25,146  
REFERENCE/DOCKET NUMBER: 03495-0109-01000  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 202-408-4400  
TELEFAX: 202-408-4400  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-336-087-2

Query Match 100.0%; Score 39; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVITGK 8  
DB 8 RAFVITGK 15

RESULT 27  
US-08-218-025A-17  
Sequence 17, Application US/08218025A  
Patent No. 5556744  
GENERAL INFORMATION:  
APPLICANT: Welner, David B.  
APPLICANT: Ugen, Kenneth E.  
APPLICANT: Williams, William V.  
TITLE OF INVENTION: Methods and Compositions for Diagnosing  
TITLE OF INVENTION: and Treating Certain HIV Infected Patients  
NUMBER OF SEQUENCES: 197  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Howson and Howson  
STREET: P.O. Box 457, 321 No. 55567441stcown Road  
CITY: Spring House  
STATE: Pennsylvania  
COUNTRY: U.S.A.  
ZIP: 19477  
COMPUTER READABLE FORM:  
MEDIUM TYPE: floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/218,025A  
FILING DATE: 24-MAR-1994  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/891,451  
FILING DATE: 29-MAY-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Bak, Mary E.  
REGISTRATION NUMBER: 31,215  
REFERENCE/DOCKET NUMBER: WST33A  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (215) 540-9206  
TELEFAX: (215) 540-5818  
INFORMATION FOR SEQ ID NO: 17:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid

TOPOLOGY: unknown  
MOLECULE TYPE: peptide  
US-08-218-025A-17

Query Match 100.0%; Score 39; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVITGK 8  
DB 8 RAFVITGK 15

RESULT 28  
US-08-709-047-7  
Sequence 7, Application US/08709047  
Patent No. 5652333  
GENERAL INFORMATION:  
APPLICANT: Fung, Michael S.C., Sun, Bill N.C, Sun, Cecily R.Y., Kim, Young W., Yu,  
APPLICANT: Liming  
TITLE OF INVENTION: THE GCLG RECEPTOR, HIV-1 GP120 REGION BINDING THERETO,  
TITLE OF INVENTION: AND RELATED PEPTIDES AND TARGETING ANTIBODIES  
NUMBER OF SEQUENCES: 13  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Tanox Biosystems, Inc.  
STREET: 10301 Stella Link Rd.  
CITY: Houston  
STATE: Texas  
COUNTRY: USA  
ZIP: 77025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.5 inch  
COMPUTER: IBM PS/2  
OPERATING SYSTEM: DOS 3.30  
SOFTWARE: Wordperfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/709,047  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/08/410,360  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Mirabel, Eric P.  
REGISTRATION NUMBER: 31,211  
REFERENCE/DOCKET NUMBER: TNX95-1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (713) 664-2288  
TELEFAX: (713) 664-8914  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
US-08-709-047-7

Query Match 100.0%; Score 39; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVITGK 8  
DB 8 RAFVITGK 15

RESULT 29  
US-08-479-400-2  
Sequence 2, Application US/08479400  
Patent No. 5679784  
GENERAL INFORMATION:  
APPLICANT: Ladant, Daniel  
APPLICANT: Leclerc, Claude  
APPLICANT: Sebou, Peter

APPLICANT: Ullmann, Agnes  
TITLE OF INVENTION: Recombinant Mutants for Inducing  
NUMBER OF SEQUENCES: 7  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &  
STREET: 1300 I Street, N.W.  
CITY: Washington  
STATE: D.C.  
COUNTRY: USA  
ZIP: 20005-3315  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/479,400  
FILING DATE: 07-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/011,644  
FILING DATE: 29-JAN-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Meyers, Kenneth J.  
REGISTRATION NUMBER: 25, 146  
REFERENCE/DOCKET NUMBER: 03495-0109-01000  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 202-408-4000  
TELEFAX: 202-408-4400  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-479-400-2

Query Match 100.0%; Score 39; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVITIG 8  
Db 8 RAFVITIG 15

RESULT 30  
US-08-410-360-7  
Sequence 7, Application US/08410360  
Patent No. 5691447  
GENERAL INFORMATION:  
APPLICANT: Fung, Michael S.C., Sun, Bill N.C, Sun, Cecily R.Y., Kim, Young W., Yu,  
APPLICANT: Liming  
TITLE OF INVENTION: THE GC1g RECEPTOR, HIV-1 gp120 REGION BINDING THERETO,  
TITLE OF INVENTION: AND RELATED PEPTIDES AND TANGERING ANTIBODIES  
NUMBER OF SEQUENCES: 13  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Tanox Biosystems, Inc.  
STREET: 10301 Stella Link Rd.  
CITY: Houston  
STATE: Texas  
COUNTRY: USA  
ZIP: 77025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.5 inch  
COMPUTER: IBM PS/2  
OPERATING SYSTEM: DOS 3.30  
SOFTWARE: Wordperfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/410,360  
FILING DATE:

CLASSIFICATION: 530  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER:  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Mirabel, Eric P.  
REGISTRATION NUMBER: 31,211  
REFERENCE/DOCKET NUMBER: TNX95-1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (713) 664-2288  
TELEFAX: (713) 664-8914  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
US-08-410-360-7

Query Match 100.0%; Score 39; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVITIG 8  
Db 8 RAFVITIG 15

RESULT 31  
US-08-095-332-1  
Sequence 1, Application US/08095332  
Patent No. 5711947  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Takahashi, Hideaki  
TITLE OF INVENTION: METHOD TO INDUCE CYTOTOXIC T LYMPHOCYTES  
TITLE OF INVENTION: SPECIFIC FOR A BROAD ARRAY OF HIV-1 ISOLATES USING HYBRID  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolash & Birch  
STREET: 301 N. Washington  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22046-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/095,332  
FILING DATE: 23-JUL-1993  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/760,530  
FILING DATE: 18-SEP-1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30,330  
REFERENCE/DOCKET NUMBER: 1173-354p  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-241-1300  
TELEFAX: 703-241-2848  
TELEX: 248345  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal

ORIGINAL SOURCE:  
ORGANISM: HIV-1  
INDIVIDUAL ISOLATE: IITB  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "synthetic peptide, sequence = residues 315  
OTHER INFORMATION: to 329 of HIV-1, isolate IITB, gp160 envelope  
OTHER INFORMATION: glycoprotein."  
US-08-095-332-1

Query Match 100.0%; Score 39; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFTTICK 8  
DB 8 RAFTTICK 15

RESULT 32  
US-08-707-801A-7  
Sequence 7, Application US/08707801A  
Patent No. 5728814  
GENERAL INFORMATION:  
APPLICANT: Fung, Michael S.C., Sun, Bill N.C, Sun, Cecily R.Y., Kim, Young W., Yu,  
APPLICANT: Liming  
TITLE OF INVENTION: THE GCLG RECEPTOR, HIV-1 GP120 REGION BINDING THERETO,  
TITLE OF INVENTION: AND RELATED PEPTIDES AND TARGETING ANTIBODIES  
NUMBER OF SEQUENCES: 13  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Tanox Biosystems, Inc.  
STREET: 10301 Stella Link Rd.  
CITY: Houston  
STATE: Texas  
COUNTRY: USA  
ZIP: 77025

COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.5 inch  
COMPUTER: IBM PS/2  
OPERATING SYSTEM: DOS 3.30  
SOFTWARE: Wordperfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/707,801A  
FILING DATE: 09/04/1996  
CLASSIFICATION: 530  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/410,360  
FILING DATE: 03/24/1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Mirabel, Eric P.  
REGISTRATION NUMBER: 31,211  
REFERENCE/DOCKET NUMBER: TX95-1A  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (713) 664-2288  
TELEFAX: (713) 664-8914  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
US-08-707-801A-7

Query Match 100.0%; Score 39; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFTTICK 8  
DB 8 RAFTTICK 15

RESULT 33  
US-08-709-006-7  
Sequence 7, Application US/08709006  
Patent No. 5731428

GENERAL INFORMATION:  
APPLICANT: Fung, Michael S.C., Sun, Bill N.C, Sun, Cecily R.Y.,  
APPLICANT: Kim, Young W., Yu, Liming  
TITLE OF INVENTION: THE GCLG RECEPTOR, HIV-1 GP120 REGION BINDING  
TITLE OF INVENTION: THERETO AND RELATED PEPTIDES AND TARGETING  
TITLE OF INVENTION: ANTIBODIES  
NUMBER OF SEQUENCES: 13  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Tanox Biosystems, Inc.  
STREET: 10301 Stella Link Rd.  
CITY: Houston  
STATE: Texas  
COUNTRY: USA  
ZIP: 77025

COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.5 inch  
COMPUTER: IBM PS/2  
OPERATING SYSTEM: DOS 3.30  
SOFTWARE: Wordperfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/709,006  
FILING DATE: 09-SEP-1996  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/410,360  
FILING DATE: 24-MAR-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Mirabel, Eric P.  
REGISTRATION NUMBER: 31,211  
REFERENCE/DOCKET NUMBER: TX95-1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (713) 664-2288  
TELEFAX: (713) 664-8914

INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
US-08-709-006-7

Query Match 100.0%; Score 39; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFTTICK 8  
DB 8 RAFTTICK 15

RESULT 34  
US-08-711-175-7  
Sequence 7, Application US/08711175  
Patent No. 5739306

GENERAL INFORMATION:  
APPLICANT: Fung, Michael S.C., Sun, Bill N.C, Sun, Cecily R.Y.,  
APPLICANT: Kim, Young W., Yu, Liming  
TITLE OF INVENTION: THE GCLG RECEPTOR, HIV-1 GP120 REGION BINDING  
TITLE OF INVENTION: THERETO AND RELATED PEPTIDES AND TARGETING  
TITLE OF INVENTION: ANTIBODIES  
NUMBER OF SEQUENCES: 13  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Tanox Biosystems, Inc.  
STREET: 10301 Stella Link Rd.  
CITY: Houston  
STATE: Texas  
COUNTRY: USA  
ZIP: 77025

COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.5 inch

COMPUTER: IBM PS/2  
OPERATING SYSTEM: DOS 3.30  
SOFTWARE: wordperfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/711,175  
FILING DATE: 09-SEP-1996  
CLASSIFICATION: 530  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/410,360  
FILING DATE: 24-MAR-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Mirabel, Eric P.  
REGISTRATION NUMBER: 31,211  
REFERENCE/DOCKET NUMBER: TNX95-1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (713) 664-2288  
TELEFAX: (713) 664-8914  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
US-08-711-175-7

Query Match 100.0%; Score 39; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8  
DB 8 RAFTVIGK 15

RESULT 35  
US-08-488-252-27  
Sequence 27, Application US/08488252  
Patent No. 5763160  
GENERAL INFORMATION:  
APPLICANT: Chang Y1 Wang  
TITLE OF INVENTION: SYNTHETIC PEPTIDES AND PROCESS  
TITLE OF INVENTION: OF USING SAME FOR THE DETECTION OF ANTIBODIES TO  
TITLE OF INVENTION: HUMAN IMMUNODEFICIENCY VIRUS (HIV) GP120 ENVELOPE  
TITLE OF INVENTION: PROTEIN, DIAGNOSIS OF AIDS AND PRE-AIDS CONDITIONS  
TITLE OF INVENTION: AND AS VACCINES  
NUMBER OF SEQUENCES: 38  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: MORGAN & FINNEGAN  
STREET: 345 PARK AVE.  
CITY: NEW YORK  
STATE: NEW YORK  
COUNTRY: USA  
ZIP: 10154  
COMPUTER READABLE FORM:  
MEDIUM TYPE: FLOPPY DISK  
COMPUTER: IBM PC COMPATIBLE  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: WORDPERFECT 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/488,252  
FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/326,676  
FILING DATE: 07-Jun-1995  
APPLICATION NUMBER: 07/726,605  
FILING DATE: 09-July-1991  
APPLICATION NUMBER: 07/663,262  
FILING DATE: 01-Mar-1991  
APPLICATION NUMBER: 07/155,321  
FILING DATE: 12-Feb-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Maria C. H. Lin  
REGISTRATION NUMBER: 29,323

REFERENCE/DOCKET NUMBER: 1151-4004 USA  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212-758-4800  
TELEFAX: (212) 751-6849  
TELEX: 421792  
INFORMATION FOR SEQ ID NO: 27:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: Amino acids  
STRANDEDNESS:  
TOPOLOGY: Unknown  
US-08-488-252-27

Query Match 100.0%; Score 39; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8  
DB 8 RAFTVIGK 15

RESULT 36  
US-08-021-879-2  
Sequence 2, Application US/08021879  
Patent No. 5817767  
GENERAL INFORMATION:  
APPLICANT: Graham P. Allaway  
TITLE OF INVENTION: Paul J. Maddon  
TITLE OF INVENTION: SYNERGISTIC COMPOSITION OF CPD-BASED  
TITLE OF INVENTION: PROTEIN AND ANTI-HIV-1 ANTIBODY, AND  
TITLE OF INVENTION: METHODS OF USING SAME  
NUMBER OF SEQUENCES: 2  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Cooper & Dunham  
STREET: 30 Rockefeller Plaza  
CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10112  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.24  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/021,879  
FILING DATE: 24-FEB-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: White, John P.  
REGISTRATION NUMBER: 28,678  
REFERENCE/DOCKET NUMBER: 41189/JPW/AJM  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 977-9550  
TELEFAX: (212) 664-0525  
TELEX: 422523 COOPUI  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-021-879-2

Query Match 100.0%; Score 39; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8  
DB 8 RAFTVIGK 15



RESULT 37  
US-07-760-530-1  
Sequence 1, Application US/07760530  
Patent No. 5820865  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Takahashi, Hidemi  
APPLICANT: Gekmal, Ronald N.  
TITLE OF INVENTION: METHOD TO INDUCE CYTOTOXIC T LYMPHOCYTES  
SPECIFIC FOR A BROAD ARRAY OF HIV-1 ISOLATES USING HYBRID  
NUMBER OF SEQUENCES: 26  
TITLE OF INVENTION: SYNTHETIC PEPTIDES  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolash & Birch  
STREET: 301 N. Washington  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22046-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/07/760,530  
FILING DATE: 19910918  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30,330  
REFERENCE/DOCKET NUMBER: 1173-354P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-241-1300  
TELEFAX: 703-241-2848  
TELEX: 248345  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: AMINO ACID  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
ORIGINAL SOURCE:  
ORGANISM: HIV-1  
INDIVIDUAL ISOLATE: IIB  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "synthetic peptide, sequence = residues 315  
OTHER INFORMATION: to 329 of HIV-1, isolate IIB, gp160 envelope  
OTHER INFORMATION: glycoprotein."  
US-07-760-530-1  
Query Match 100.0%; Score 39; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RAFVITGK 8  
DB 8 RAFVITGK 15  
RESULT 38  
US-07-950-571A-3  
Sequence 3, Application US/07950571A  
Patent No. 5854400  
GENERAL INFORMATION:  
APPLICANT: Chang, Tse Wen, Fung, Michael S.C., Sun, Bill N.C., Sun, Cecily R.Y.  
APPLICANT: Chang, Nancy T.  
TITLE OF INVENTION: Monoclonal Antibodies which Neutralize HIV-1 Infection

NUMBER OF SEQUENCES: 8  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Tanox Biosystems, Inc.  
STREET: 10301 Stella Link Rd.  
CITY: Houston  
STATE: Texas  
COUNTRY: USA  
ZIP: 77025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Hi Density Diskette  
COMPUTER: IBM PS/2  
OPERATING SYSTEM: DOS, Version 3.30  
SOFTWARE: Wordperfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/07/950,571A  
FILING DATE: 19920922  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: No. 5854400 07/767,533  
FILING DATE: 09/26/1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Mirabel, Eric P.  
REGISTRATION NUMBER: 31,211  
REFERENCE/DOCKET NUMBER: TNX87-11BBC  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 713-664-2288  
TELEFAX: 713-664-8914  
INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: AMINO ACID  
TOPOLOGY: linear  
US-07-950-571A-3  
Query Match 100.0%; Score 39; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RAFVITGK 8  
DB 8 RAFVITGK 15  
RESULT 39  
US-08-975-699-6  
Sequence 6, Application US/08975699  
Patent No. 5858369  
GENERAL INFORMATION:  
APPLICANT: MATSUO, KAZUHIRO  
APPLICANT: CHUJO, YOSHIOMO  
APPLICANT: YAMAZAKI, AKIHIRO  
APPLICANT: HONDA, MITSUO  
APPLICANT: YAMAKAZI, SHODO  
APPLICANT: TASAKA, HIROMICHI  
TITLE OF INVENTION: ANTI-AIDS SECRETORY RECOMBINANT BCG  
NUMBER OF SEQUENCES: 27  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,  
ADDRESSER: P.C.  
STREET: 1755 S. JEFFERSON DAVIS HIGHWAY, SUITE 400  
CITY: ARLINGTON  
STATE: VA  
COUNTRY: USA  
ZIP: 22202  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/975,699  
FILING DATE:

CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/619,512  
FILING DATE: 29-MAR-1996  
APPLICATION NUMBER: PCT/JP95/01515  
FILING DATE: 31-JUL-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: JP 178462/1994  
FILING DATE: 29-JUL-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: OBLON, NORMAN F.  
REGISTRATION NUMBER: 24,618  
REFERENCE/DOCKET NUMBER: 10-795-0X PCT  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-413-3000  
TELEFAX: 703-413-2220  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS  
STRAIN: HIV-1 (JAPAN)  
US-08-975-699-6

Query Match 100.0%; Score 39; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTTGK 8  
Db 8 RAFVTTGK 15

RESULT 40  
US-08-972-089-6  
Sequence 6, Application US/08972089  
Patent No. 5885580  
GENERAL INFORMATION:  
APPLICANT: MATSUO, KAZUHIRO  
APPLICANT: CHUDO, YOSHITOMO  
APPLICANT: YAMAZAKI, AKIHIRO  
APPLICANT: HONDA, MITSUO  
APPLICANT: YAMAKAZI, SHUDO  
APPLICANT: TASAKI, HIROMICHI  
TITLE OF INVENTION: ANTI-AIDS SECRETORY RECOMBINANT BCG  
TITLE OF INVENTION: VACCINE  
NUMBER OF SEQUENCES: 27  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,  
ADDRESS: P. C.  
STREET: 1755 S. JEFFERSON DAVIS HIGHWAY, SUITE 400  
CITY: ARLINGTON  
STATE: VA  
COUNTRY: USA  
ZIP: 22202  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/972,089  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/975,699  
FILING DATE: PCT/JP95/01515  
FILING DATE: 31-JUL-1995

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: JP 178462/1994  
FILING DATE: 29-JUL-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: OBLON, NORMAN F.  
REGISTRATION NUMBER: 24,618  
REFERENCE/DOCKET NUMBER: 10-795-0X PCT  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-413-3000  
TELEFAX: 703-413-2220  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS  
STRAIN: HIV-1 (JAPAN)  
US-08-972-089-6

Query Match 100.0%; Score 39; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTTGK 8  
Db 8 RAFVTTGK 15

RESULT 41  
US-08-455-625-7  
Sequence 7, Application US/08455625  
Patent No. 5932218  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. D.  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsumori  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,625  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:

LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
US-08-455-625-7  
/note= "p1811B peptide, see Table v"

Query Match 100.0%; Score 39; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTTGK 8  
DB 8 RAFVTTGK 15

RESULT 42  
US-08-455-625-11  
Sequence 11, Application US/08455625  
Patent No. 5932218  
GENERAL INFORMATION:  
APPLICANT: Bezrofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. D.  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,625  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8050  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 11:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "p18-3, see Table v"

US-08-455-625-11  
Query Match 100.0%; Score 39; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTTGK 8  
DB 8 RAFVTTGK 15

RESULT 43  
US-08-455-625-12  
Sequence 12, Application US/08455625  
Patent No. 5932218  
GENERAL INFORMATION:  
APPLICANT: Bezrofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. D.  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,625  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8050  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 12:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "p18-4, see Table v"

US-08-455-625-12  
Query Match 100.0%; Score 39; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTTGK 8  
DB 8 RAFVTTGK 15

```
RESULT 44
US-08-455-625-13
; Sequence 13, Application US/08455625
; Patent No. 5932218
; GENERAL INFORMATION:
; APPLICANT: Berzofsky, Jay A.
; APPLICANT: Ahlers, Jeffrey D.
; APPLICANT: Pendleton, C. D.
; APPLICANT: Nara, Peter
; APPLICANT: Shirai, Mutsunori
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolasch & Birch
; STREET: P.O. Box 747
; CITY: Falls Church
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22040-0747
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,625
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/060,988
; FILING DATE: 14-MAY-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Svensson, Leonard R.
; REGISTRATION NUMBER: 30330
; REFERENCE/DOCKET NUMBER: 1173-434P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-205-8000
; TELEFAX: 703-205-8050
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: internal
; FEATURE:
; NAME/KEY: Peptide
; LOCATION: 1..15
; OTHER INFORMATION: /label= peptide
; OTHER INFORMATION: /note= "p18-5, see Table v"
US-08-455-625-13

Query Match 100.0%; Score 39; DB 2; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.072;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTIGK 8
Db 8 RAFTTIGK 15

RESULT 45
US-08-455-625-14
; Sequence 14, Application US/08455625
; Patent No. 5932218
; GENERAL INFORMATION:
; APPLICANT: Berzofsky, Jay A.
; APPLICANT: Ahlers, Jeffrey D.
; APPLICANT: Pendleton, C. D.
; APPLICANT: Nara, Peter
```

```
APPLICANT: Shirai, Mutsunori
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T
; TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolasch & Birch
; STREET: P.O. Box 747
; CITY: Falls Church
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22040-0747
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,625
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/060,988
; FILING DATE: 14-MAY-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Svensson, Leonard R.
; REGISTRATION NUMBER: 30330
; REFERENCE/DOCKET NUMBER: 1173-434P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-205-8000
; TELEFAX: 703-205-8050
; INFORMATION FOR SEQ ID NO: 14:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: internal
; FEATURE:
; NAME/KEY: Peptide
; LOCATION: 1..15
; OTHER INFORMATION: /label= peptide
; OTHER INFORMATION: /note= "p18-6, see Table v"
US-08-455-625-14

Query Match 100.0%; Score 39; DB 2; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.072;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTIGK 8
Db 8 RAFTTIGK 15

RESULT 46
US-08-455-625-15
; Sequence 15, Application US/08455625
; Patent No. 5932218
; GENERAL INFORMATION:
; APPLICANT: Berzofsky, Jay A.
; APPLICANT: Ahlers, Jeffrey D.
; APPLICANT: Pendleton, C. D.
; APPLICANT: Nara, Peter
; APPLICANT: Shirai, Mutsunori
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T
; TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolasch & Birch
; STREET: P.O. Box 747
; CITY: Falls Church
; STATE: Virginia
```

COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,625  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000.  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 15:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "p18-7, see Table V"  
US-08-455-625-15

Query Match 100.0%; Score 39; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
DB 8 RAFTYICK 15

RESULT 47  
US-08-395-204-2  
Sequence 2, Application US/08395204  
Patent No. 5935580  
GENERAL INFORMATION:  
APPLICANT: Ladant, Daniel  
APPLICANT: Leclerc, Claude  
APPLICANT: Sebo, Peter  
APPLICANT: Ullmann, Agnes  
TITLE OF INVENTION: Recombinant Mutants for Inducing  
TITLE OF INVENTION: Specific Immune Responses  
NUMBER OF SEQUENCES: 5  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &  
STREET: 1300 I Street, N.W.  
CITY: Washington  
STATE: D.C.  
COUNTRY: USA  
ZIP: 20005-3315  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/395,204  
FILING DATE:  
CLASSIFICATION: 435

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/871,795  
FILING DATE: 21-APR-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Meyers, Kenneth J.  
REGISTRATION NUMBER: 25,146  
REFERENCE/DOCKET NUMBER: 03495-0109-00000  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 202-408-4000  
TELEFAX: 202-408-4400  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-395-204-2

Query Match 100.0%; Score 39; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
DB 8 RAFTYICK 15

RESULT 48  
US-08-628-687-1  
Sequence 1, Application US/08628687  
Patent No. 5939277  
GENERAL INFORMATION:  
APPLICANT: Rakowicz-Szulczynska, Eva M.  
TITLE OF INVENTION: DETECTION AND TREATMENT OF BREAST AND  
TITLE OF INVENTION: GYNECOLOGICAL CANCER  
NUMBER OF SEQUENCES: 14  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: FISH & NEAVE  
STREET: 1251 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10020  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/628,687  
FILING DATE: 14-JUN-1996  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/138,141  
FILING DATE: 15-OCT-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Haley Jr., James F.  
REGISTRATION NUMBER: 27,794  
REFERENCE/DOCKET NUMBER: APOLLO/1CIP1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212-596-9000  
TELEFAX: 212-596-9090  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
STRANDEDNESS:  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
HYPOTHEICAL: NO  
ANTI-SENSE: NO  
FRAGMENT TYPE: internal  
US-08-628-687-1

Query Match 100.0%; Score 39; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTIGK 8  
|||||||  
DB 8 RAFTTIGK 15

RESULT 49  
US-07-847-311A-1  
Sequence 1, Application US/07847311A  
Patent No. 5976541  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Takeshita, Toshiyuki  
APPLICANT: Shirai, Mutsumori  
APPLICANT: Pendleton, C.D.  
APPLICANT: Koslowski, Steven  
APPLICANT: Margulies, David H.  
TITLE OF INVENTION: Potent Peptide for Stimulation of  
TITLE OF INVENTION: Cytotoxic T Lymphocytes Specific for the HIV-1 Envelope  
NUMBER OF SEQUENCES: 20  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolash & Birch  
STREET: 301 N. Washington  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22046-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/07/847,311A  
FILING DATE: 06-MAR-1992  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30,330  
REFERENCE/DOCKET NUMBER: 1173-392P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-241-1300  
TELEFAX: 703-241-2848  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
HYPOTHETICAL: NO  
FRAGMENT TYPE: internal  
ORIGINAL SOURCE:  
ORGANISM: Human Immunodeficiency Virus Type I  
STRAIN: IIB  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "Cytotoxic T lymphocyte immunodominant  
OTHER INFORMATION: /note= HIV-1 envelope glycoprotein from strain  
OTHER INFORMATION: IIB; activatable by protease cleavage to core  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 4..13  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "Highly immunogenic core peptide from  
OTHER INFORMATION: immunodominant region of envelope glycoprotein of  
OTHER INFORMATION: HIV-1 strain IIB; peptide p18-I-10"  
FEATURE:

NAME/KEY: Peptide  
LOCATION: 5..13  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "peptide p18-I-9"  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 4..12  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "peptide p18-T-9"  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 3..11  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "peptide p18-V-9"  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 2..11  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "peptide p18-V-10"  
US-07-847-311A-1

Query Match 100.0%; Score 39; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTIGK 8  
|||||||  
DB 8 RAFTTIGK 15

RESULT 50  
US-08-986-234-13  
Sequence 13, Application US/08986234  
Patent No. 5981706  
GENERAL INFORMATION:  
APPLICANT: Wallen, et al.  
TITLE OF INVENTION: Methods for Synthesizing Heat Shock Protein Complexes  
FILE REFERENCE: UNME-0008-1  
CURRENT APPLICATION NUMBER: US/08/986,234  
CURRENT FILING DATE: 1997-12-05  
NUMBER OF SEQ ID NOS: 114  
SOFTWARE: Patentin Ver. 2.0  
SEQ ID NO 13  
LENGTH: 15  
TYPE: PRT  
ORGANISM: Human immunodeficiency virus  
US-08-986-234-13

Query Match 100.0%; Score 39; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTIGK 8  
|||||||  
DB 8 RAFTTIGK 15

RESULT 51  
US-08-986-234-28  
Sequence 28, Application US/08986234  
Patent No. 5981706  
GENERAL INFORMATION:  
APPLICANT: Wallen, et al.  
TITLE OF INVENTION: Methods for Synthesizing Heat Shock Protein Complexes  
FILE REFERENCE: UNME-0008-1  
CURRENT APPLICATION NUMBER: US/08/986,234  
CURRENT FILING DATE: 1997-12-05  
NUMBER OF SEQ ID NOS: 114  
SOFTWARE: Patentin Ver. 2.0  
SEQ ID NO 28  
LENGTH: 15  
TYPE: PRT  
ORGANISM: Human immunodeficiency virus

US-08-986-234-28

Query Match 100.0%; Score 39; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8  
DB 8 RAFTVIGK 15

RESULT 52

US-08-492-076-22  
; Sequence 22, Application US/08492076A  
; Patent No. 6060064  
; GENERAL INFORMATION:  
; APPLICANT: Adams, Sally E.  
; APPLICANT: Burns, Nigel R.  
; APPLICANT: Richardson, Simon M.  
; TITLE OF INVENTION: No. 6060064el Proteinaceous Particles  
; FILE REFERENCE: 10180.60968  
; CURRENT APPLICATION NUMBER: US/08/492,076A  
; CURRENT FILING DATE: 1995-06-28  
; EARLIER APPLICATION NUMBER: PCT/GB93/02656  
; EARLIER FILING DATE: 1993-12-24  
; NUMBER OF SEQ ID NOS: 23  
; SOFTWARE: Patentin Ver. 2.0  
; SEQ ID NO 22  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: Human immunodeficiency virus type 1  
US-08-492-076-22

Query Match 100.0%; Score 39; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8  
DB 8 RAFTVIGK 15

RESULT 53

US-08-493-071-25  
; Sequence 25, Application US/08493071  
; Patent No. 6127149  
; GENERAL INFORMATION:  
; APPLICANT: Hirai, Yonei  
; APPLICANT: Koshida, Shogo  
; APPLICANT: Oka, Yumiko  
; TITLE OF INVENTION: MODIFIED EPI MORPHIN  
; NUMBER OF SEQUENCES: 30  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: LOWE, PRICE, LEBLANC & BECKER  
; STREET: 99 CANAL CENTER PLAZA, SUITE 300  
; CITY: ALEXANDRIA  
; STATE: VA  
; COUNTRY: USA  
; ZIP: 22314  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/493,071  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Price, Robert L.  
; REGISTRATION NUMBER: 22,685  
; REFERENCE/DOCKET NUMBER: 715-107  
; TELECOMMUNICATION INFORMATION:

TELEPHONE: 703-684-1111

TELEFAX: 703-684-1124

INFORMATION FOR SEQ ID NO: 25:

SEQUENCE CHARACTERISTICS:

LENGTH: 15 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-493-071-25

Query Match 100.0%; Score 39; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8  
DB 8 RAFTVIGK 15

RESULT 54

US-08-480-332-1  
; Sequence 1, Application US/08480332  
; Patent No. 6180134  
; GENERAL INFORMATION:  
; APPLICANT: Zalipsky, Samuel; Woodle, Martin; Martin, Francis;  
; TITLE OF INVENTION: Enhanced Circulation Effector Composition and  
; TITLE OF INVENTION: Method  
; NUMBER OF SEQUENCES: 10  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Dehlinger & Associates  
; STREET: 350 Cambridge Avenue, Suite 250  
; CITY: Palo Alto  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94306  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/480,332  
; FILING DATE: 7-JUN-1995  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/316,436  
; FILING DATE: 29-SEP-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/035,443  
; FILING DATE: 23-MAR-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Mohr, Judy M.  
; REGISTRATION NUMBER: 38,563  
; REFERENCE/DOCKET NUMBER: 5325-0115.31  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 324-0880  
; TELEFAX: (415) 324-0960  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: unknown  
; TOPOLOGY: unknown  
; MOLECULE TYPE: peptide  
; HYPOTHETICAL: NO  
; ANTI-SENSE: NO  
; ORIGINAL SOURCE:  
; INDIVIDUAL ISOLATE: Peptide 1, Fig. 13  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: 1..15

US-08-480-332-1

Query Match

Best Local Similarity 100.0%; Score 39; DB 3; Length 15;  
Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8

Db 8 RAFTVIGK 15

RESULT 55

US-08-455-685-7

Sequence 7, Application US/08455685  
Patent No. 6214347

GENERAL INFORMATION:

APPLICANT: Berzofsky, Jay A.

APPLICANT: Ahlers, Jeffrey D.

APPLICANT: Pendleton, C. David

APPLICANT: Nara, Peter

APPLICANT: Shirai, Mutsunori

TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT

TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND

NUMBER OF SEQUENCES: 40

CORRESPONDENCE ADDRESSES: 40

ADDRESSEE: Fish &amp; Richardson P.C.

STREET: 225 Franklin Street

CITY: Boston

STATE: MA

COUNTRY: US

ZIP: 02110-2804

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: Windows95

SOFTWARE: FASTSEQ for Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/455,685

FILING DATE: 31-MAY-1995

PRIORITY APPLICATION DATA:

APPLICATION NUMBER: 08/060,988

FILING DATE: 14-MAY-1993

APPLICATION NUMBER: 07/847,311

FILING DATE: 06-MAR-1992

APPLICATION NUMBER: 07/751,998

FILING DATE: 29-AUG-1991

APPLICATION NUMBER: 07/148,692

FILING DATE: 26-JAN-1988

ATTORNEY/AGENT INFORMATION:

NAME: Beattie, Ingrid A.

REGISTRATION NUMBER: P-42,306

REFERENCE/DOCKET NUMBER: 08830/022003

TELECOMMUNICATION INFORMATION:

TELEPHONE: 617/542-5070

TELEFAX: 617/542-8906

TELEX: 200154

INFORMATION FOR SEQ ID NO: 7:

SEQUENCE CHARACTERISTICS:

LENGTH: 15 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-455-685-7

Query Match 100.0%; Score 39; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8

Db 8 RAFTVIGK 15

RESULT 56

US-08-455-685-11

Sequence 11, Application US/08455685  
Patent No. 6214347

GENERAL INFORMATION:

APPLICANT: Berzofsky, Jay A.

APPLICANT: Ahlers, Jeffrey D.

APPLICANT: Pendleton, C. David

APPLICANT: Nara, Peter

APPLICANT: Shirai, Mutsunori

TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT

TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND

NUMBER OF SEQUENCES: 40

CORRESPONDENCE ADDRESSES: 40

ADDRESSEE: Fish &amp; Richardson P.C.

STREET: 225 Franklin Street

CITY: Boston

STATE: MA

COUNTRY: US

ZIP: 02110-2804

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: Windows95

SOFTWARE: FASTSEQ for Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/455,685

FILING DATE: 31-MAY-1995

PRIORITY APPLICATION DATA:

APPLICATION NUMBER: 08/060,988

FILING DATE: 14-MAY-1993

APPLICATION NUMBER: 07/847,311

FILING DATE: 06-MAR-1992

APPLICATION NUMBER: 07/751,998

FILING DATE: 29-AUG-1991

APPLICATION NUMBER: 07/148,692

FILING DATE: 26-JAN-1988

ATTORNEY/AGENT INFORMATION:

NAME: Beattie, Ingrid A.

REGISTRATION NUMBER: P-42,306

REFERENCE/DOCKET NUMBER: 08830/022003

TELECOMMUNICATION INFORMATION:

TELEPHONE: 617/542-5070

TELEFAX: 617/542-8906

TELEX: 200154

INFORMATION FOR SEQ ID NO: 11:

SEQUENCE CHARACTERISTICS:

LENGTH: 15 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-455-685-11

Query Match 100.0%; Score 39; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8

Db 8 RAFTVIGK 15

RESULT 57

US-08-455-685-12

Sequence 12, Application US/08455685  
Patent No. 6214347

GENERAL INFORMATION:

APPLICANT: Berzofsky, Jay A.

APPLICANT: Ahlers, Jeffrey D.

APPLICANT: Pendleton, C. David

APPLICANT: Nara, Peter





PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/060,988  
FILING DATE: 14-MAY-1993  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022003  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 14:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-455-685-14

Query Match 100.0%; Score 39; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8  
DB 8 RAFTVIGK 15

RESULT 60  
US-08-455-685-15  
Sequence 15, Application US/08455685  
Patent No. 6214347  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 40  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,685  
FILING DATE: 31-MAY-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/060,988  
FILING DATE: 14-MAY-1993  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:

NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022003  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 15:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-455-685-15

Query Match 100.0%; Score 39; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8  
DB 8 RAFTVIGK 15

RESULT 61  
US-08-060-988A-7  
Sequence 7, Application US/08060988A  
Patent No. 6294322  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES  
TITLE OF INVENTION: THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 48  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/060,988A  
FILING DATE: 14-MAY-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid

TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-060-988A-7

Query Match 100.0%; Score 39; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTTGK 8  
DB 8 RAFVTTGK 15

RESULT 62  
US-08-060-988A-11  
Sequence 11, Application US/08060988A  
Patent No. 6294322  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlert, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES  
TITLE OF INVENTION: THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 48  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FASTSEQ for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/060,988A  
FILING DATE: 14-MAY-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 11:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-060-988A-11

Query Match 100.0%; Score 39; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RAFVTTGK 8  
DB 8 RAFVTTGK 15

RESULT 63  
US-08-060-988A-12  
Sequence 12, Application US/08060988A  
Patent No. 6294322  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlert, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES  
TITLE OF INVENTION: THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 48  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FASTSEQ for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/060,988A  
FILING DATE: 14-MAY-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 12:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-060-988A-12

Query Match 100.0%; Score 39; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTTGK 8  
DB 8 RAFVTTGK 15

RESULT 64  
US-08-060-988A-13  
Sequence 13, Application US/08060988A  
Patent No. 6294322  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlert, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter

APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES  
TITLE OF INVENTION: THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
NUMBER OF SEQUENCES: 48  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FASTSEQ for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/060,988A  
FILING DATE: 14-MAY-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-060-988A-13

Query Match 100.0%; Score 39; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTVIGK 8  
Db 8 RAFTVIGK 15

RESULT 65  
US-08-060-988A-14  
Sequence 14, Application US/08060988A  
Patent No. 6294322  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES  
TITLE OF INVENTION: THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
NUMBER OF SEQUENCES: 48  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA

COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FASTSEQ for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/060,988A  
FILING DATE: 14-MAY-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 14:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-060-988A-14

Query Match 100.0%; Score 39; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTVIGK 8  
Db 8 RAFTVIGK 15

RESULT 66  
US-08-060-988A-15  
Sequence 15, Application US/08060988A  
Patent No. 6294322  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES  
TITLE OF INVENTION: THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
NUMBER OF SEQUENCES: 48  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FASTSEQ for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/060,988A  
FILING DATE: 14-MAY-1993  
PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1998  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 15:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-060-988A-15

Query Match 100.0%; Score 39; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTTGK 8  
Db 8 RAFVTTGK 15

RESULT 67  
US-09-051-006-8  
Sequence 8, Application US/09051006  
GENERAL INFORMATION:  
APPLICANT: Mogam Biotechnology Research Institute  
APPLICANT: Kim, Tae-Young  
APPLICANT: Lee, Ki-Young  
APPLICANT: Chang, Jin-Soo  
APPLICANT: Hwang, Sung-Yoo  
APPLICANT: Hwang, Yu-Kyeong  
APPLICANT: Choi, Myeong  
APPLICANT: Cheong, Hong-Seok  
TITLE OF INVENTION: Liposomes Comprising Peptide Antigens  
TITLE OF INVENTION: Derived from X Protein of Hepatitis B virus  
FILE REFERENCE: 0136/0E154  
CURRENT APPLICATION NUMBER: US/09/051,006  
CURRENT FILING DATE: 1998-03-30  
NUMBER OF SEQ ID NOS: 10  
SOFTWARE: FaastSeq for Windows Version 3.0  
SEQ ID NO 8  
LENGTH: 15  
TYPE: PRT  
ORGANISM: HIV  
US-09-051-006-8

Query Match 100.0%; Score 39; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTTGK 8  
Db 8 RAFVTTGK 15

RESULT 68  
US-09-389-390-1  
Sequence 1, Application US/09389390  
Patent No. 6558961  
GENERAL INFORMATION:  
APPLICANT: SARPHIE  
TITLE OF INVENTION: IMMUNODIAGNOSTICS USING PARTICLE DELIVERY METHODS

FILE REFERENCE: 0PF1620  
CURRENT APPLICATION NUMBER: US/09/389,390  
CURRENT FILING DATE: 1999-09-03  
PRIOR APPLICATION NUMBER: 60/099,261  
PRIOR FILING DATE: 1998-09-04  
PRIOR APPLICATION NUMBER: 60/139,045  
PRIOR FILING DATE: 1999-06-10  
NUMBER OF SEQ ID NOS: 10  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 1  
LENGTH: 15  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: synthetic  
OTHER INFORMATION: construct  
US-09-389-390-1

Query Match 100.0%; Score 39; DB 4; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTTGK 8  
Db 8 RAFVTTGK 15

RESULT 69  
US-09-508-552-15  
Sequence 15, Application US/09508552  
Patent No. 6749856  
GENERAL INFORMATION:  
APPLICANT: Bertozsky, Jay A.  
APPLICANT: Belyakov, Igor M.  
APPLICANT: Derby, Michael A.  
APPLICANT: Kelsall, Brian L.  
APPLICANT: Strober, Warren  
APPLICANT: THE GOVERNMENT OF THE UNITED STATES OF AMERICA, as  
TITLE OF INVENTION: MUCOSAL CYTOTOXIC T LYMPHOCYTE RESPONSES  
FILE REFERENCE: 368200PCSE0  
CURRENT APPLICATION NUMBER: US/09/508,552  
CURRENT FILING DATE: 2000-06-12  
PRIOR APPLICATION NUMBER: 60/058,523  
PRIOR FILING DATE: 1997-09-11  
PRIOR APPLICATION NUMBER: 60/074,894  
PRIOR FILING DATE: 1998-02-17  
NUMBER OF SEQ ID NOS: 20  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 15  
LENGTH: 15  
TYPE: PRT  
ORGANISM: Human immunodeficiency virus type 1  
US-09-508-552-15

Query Match 100.0%; Score 39; DB 4; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTTGK 8  
Db 8 RAFVTTGK 15

RESULT 70  
US-09-827-688-9  
Sequence 9, Application US/09827688  
Patent No. 6821955  
GENERAL INFORMATION:  
APPLICANT: ORSON FRANK  
APPLICANT: KINSEY, BERMA  
APPLICANT: BHOGAL, BALBIR  
TITLE OF INVENTION: MACROAGGREGATED PROTEIN CONJUGATES AS ORAL GENETIC IMMUNIZATION DI

FILE REFERENCE: P01949US1/10004014  
CURRENT APPLICATION NUMBER: US/09/827,688  
CURRENT FILING DATE: 2001-04-06  
PRIOR APPLICATION NUMBER: 60/195,680  
PRIOR FILING DATE: 2000-04-07  
NUMBER OF SEQ ID NOS: 13  
SOFTWARE: PatentIn version 3.0  
SEQ ID NO 9  
LENGTH: 15  
TYPE: PRT  
ORGANISM: HIV p18  
US-09-827-688-9

Query Match 100.0%; Score 39; DB 4; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTVIGK 8  
| | | | |  
| | | | |  
Db 8 RAFTVIGK 15

## RESULT 71

PCT-US92-10378-1

Sequence 1, Application PC/TUS9210378

GENERAL INFORMATION:

APPLICANT: BOARD OF REGENTS, THE UNIVERSITY OF

APPLICANT: TEXAS SYSTEM

APPLICANT: SASTRY, Jagannadha K.

APPLICANT: ARLINGHAUS, Ralph B.

APPLICANT: PLATSOUCHS, Chris D.

APPLICANT: NEHEBE, Pyramed N.

TITLE OF INVENTION: METHODS AND COMPOSITIONS

FOR ELICITING IMMUNE OR ANTI-INFECTION RESPONSES

NUMBER OF SEQUENCES: 7

CORRESPONDENCE ADDRESS:

ADDRESSEE: Arnold, White &amp; Durkee

STREET: P.O. Box 4433

CITY: Houston

STATE: Texas

COUNTRY: US

ZIP: 77210

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: WordPerfect 5.1

CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US92/10378

FILING DATE: 19921202

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/800,932

FILING DATE: December 2, 1991

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/945865

FILING DATE: September 16, 1992

ATTORNEY/AGENT INFORMATION:

NAME: Parker, David L.

REGISTRATION NUMBER: 32,165

REFERENCE/DOCKET NUMBER: UFG305PCT

TELEPHONE: 512-320-7200

TELEFAX: 512-474-7577

TELEX: Not Applicable

INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

LENGTH: 15 amino acids

TYPE: AMINO ACID

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

PCT-US92-10378-1

Query Match 100.0%; Score 39; DB 5; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTVIGK 8  
| | | | |  
| | | | |  
Db 8 RAFTVIGK 15

## RESULT 72

PCT-US94-05142-7

Sequence 7, Application PC/TUS9405142

GENERAL INFORMATION:

APPLICANT:

TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT

FOR ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T

CELLS AGAINST HIV

NUMBER OF SEQUENCES: 36

CORRESPONDENCE ADDRESS:

ADDRESSEE: Birch, Stewart, Kolach &amp; Birch

STREET: P.O. Box 747

CITY: Falls Church

STATE: Virginia

COUNTRY: USA

ZIP: 22040-0747

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US94/05142

FILING DATE: 13-MAY-1994

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/060,988

FILING DATE: 14-MAY-1993

ATTORNEY/AGENT INFORMATION:

NAME: Svenson, Leonard R.

REGISTRATION/DOCKET NUMBER: 30330

TELECOMMUNICATION INFORMATION:

TELEPHONE: 703-205-8000

TELEFAX: 703-205-8050

INFORMATION FOR SEQ ID NO: 7:

SEQUENCE CHARACTERISTICS:

LENGTH: 15 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

FRAGMENT TYPE: internal

FEATURE:

NAME/KEY: Peptide

LOCATION: 1..15

OTHER INFORMATION: /label= peptide

PCT-US94-05142-7 /note= "p18111B peptide, see Table v"

Query Match 100.0%; Score 39; DB 5; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTVIGK 8  
| | | | |  
| | | | |  
Db 8 RAFTVIGK 15

## RESULT 73

PCT-US94-05142-11

Sequence 11, Application PC/TUS9405142

GENERAL INFORMATION:

APPLICANT:

TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Birch, Stewart, Kolaesch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
OPERATING SYSTEM: IBM PC compatible  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/05142  
FILING DATE: 13-MAY-1994  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensen, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8050  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 11:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "p18-3, see Table v"  
PCT-US94-05142-11  
Query Match 100.0%; Score 39; DB 5; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 1 RAFTTICK 8  
DB 8 RAFTTICK 15  
RESULT 74  
PCT-US94-05142-12  
Sequence 12, Application PC/TUS9405142  
GENERAL INFORMATION:  
APPLICANT:  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Birch, Stewart, Kolaesch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
OPERATING SYSTEM: IBM PC compatible  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/05142  
FILING DATE: 13-MAY-1994  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensen, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8050  
TELEFAX: 703-205-8050

SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/05142  
FILING DATE: 13-MAY-1994  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensen, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8050  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 12:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "p18-4, see Table v"  
PCT-US94-05142-12  
Query Match 100.0%; Score 39; DB 5; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 1 RAFTTICK 8  
DB 8 RAFTTICK 15  
RESULT 75  
PCT-US94-05142-13  
Sequence 13, Application PC/TUS9405142  
GENERAL INFORMATION:  
APPLICANT:  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Birch, Stewart, Kolaesch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
OPERATING SYSTEM: IBM PC compatible  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/05142  
FILING DATE: 13-MAY-1994  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensen, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8050  
TELEFAX: 703-205-8050

INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
PCT-US94-05142-13  
OTHER INFORMATION: /note= "p18-5, see Table V"

Query Match 100.0%; Score 39; DB 5; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTTIGK 8  
Db 8 RAFTTIGK 15

RESULT 76  
PCT-US94-05142-14  
Sequence 14, Application PC/TUS9405142  
GENERAL INFORMATION:  
APPLICANT:  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/05142  
FILING DATE: 13-MAY-1994  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 14:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
PCT-US94-05142-14  
OTHER INFORMATION: /note= "p18-6, see Table V"

Query Match 100.0%; Score 39; DB 5; Length 15;

Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTTIGK 8  
Db 8 RAFTTIGK 15

RESULT 77  
PCT-US94-05142-15  
Sequence 15, Application PC/TUS9405142  
GENERAL INFORMATION:  
APPLICANT:  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/05142  
FILING DATE: 13-MAY-1994  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 15:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
PCT-US94-05142-15  
OTHER INFORMATION: /note= "p18-7, see Table V"

Query Match 100.0%; Score 39; DB 5; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTTIGK 8  
Db 8 RAFTTIGK 15

RESULT 78  
US-08-657-392-28  
Sequence 28, Application US/08657392  
Patent No. 5843634  
GENERAL INFORMATION:  
APPLICANT: Brate, E.M.  
APPLICANT: Brennan, C.A.



APPLICANT: Bridon, D.P.  
APPLICANT: Jaffe, K.D.  
APPLICANT: Kraft, G.A.  
APPLICANT: Mandelki, W.  
APPLICANT: March, S.C.  
APPLICANT: Russell, J.R.  
APPLICANT: Yue, V.T.  
TITLE OF INVENTION: Genetically Engineered Enzymes And Their  
TITLE OF INVENTION: Conjugates For Diagnostic Assays  
NUMBER OF SEQUENCES: 34  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: ABBOTT LABORATORIES  
STREET: One Abbott Park Road  
CITY: Abbott Park  
STATE: Illinois  
COUNTRY: USA  
ZIP: 60064-3500  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: SoftPC  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/657,392  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/100,708  
FILING DATE: July 29, 1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Wong, Mean King  
REGISTRATION NUMBER: 33,561  
REFERENCE/DOCKET NUMBER: 5324, US, P1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (708) 938-3517  
TELEFAX: (708) 938-2623  
TELEX:  
INFORMATION FOR SEQ ID NO: 28:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 16 amino acid residues  
TYPE: amino acid  
STRANDEDNESS:  
TOPOLOGY: unknown  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM:  
US-08-657-392-28

Query Match 100.0%; Score 39; DB 2; Length 16;  
Best Local Similarity 100.0%; Pred. No. 0.077;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
Db 9 RAFTYICK 16

RESULT 79  
US-08-251-472-2  
Sequence 2, Application US/08251472  
Patent No. 5871746  
GENERAL INFORMATION:  
APPLICANT: BOUTILLON, CHRISTOPHE, MARTINON,  
APPLICANT: FREDERIC, GRAS-MASSIE, HELENE,  
APPLICANT: GOMARD, ELISABETH, SERGHERART,  
APPLICANT: CHRISTIAN, MAGNE, REMY, TARTAR,  
APPLICANT: ANDRE, LEVY, JEAN-PAUL,  
TITLE OF INVENTION: CYTOTOXIC T LYMPHOCYTE  
TITLE OF INVENTION: -INDUCING LIPOPEPTIDES AND USE AS VACCINES  
NUMBER OF SEQUENCES: 11  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: BIERMAN & MUSERLIAN  
STREET: 600 THIRD AVENUE

CITY: NEW YORK  
STATE: NEW YORK  
COUNTRY: USA  
ZIP: 10016  
COMPUTER READABLE FORM:  
MEDIUM TYPE: FLOPPY DISK  
COMPUTER: IBM PC COMPATIBLE  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: ASCII  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/251,472  
FILING DATE: 31-MAY-1994  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: MUSERLIAN, CHARLES A  
REGISTRATION NUMBER: 19,683  
REFERENCE/DOCKET NUMBER: 102,1511  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 661-8000  
TELEFAX: (212) 661-8002  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 16  
TYPE: amino acid  
STRANDEDNESS: unknown  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: Internal  
ORIGINAL SOURCE:  
ORGANISM: HIV-1  
FEATURE:  
LOCATION: ENV 312-327  
US-08-251-472-2

Query Match 100.0%; Score 39; DB 2; Length 16;  
Best Local Similarity 100.0%; Pred. No. 0.077;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
Db 9 RAFTYICK 16

RESULT 80  
US-08-484-905-35  
Sequence 35, Application US/08484905  
Patent No. 5976551  
GENERAL INFORMATION:  
APPLICANT: Mottez, Estelle  
APPLICANT: Kourilsky, Philippe  
TITLE OF INVENTION: An Altered Major Histocompatibility  
TITLE OF INVENTION: Complex (MHC) Determinant and Methods for Using the  
NUMBER OF SEQUENCES: 127  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Finnegan, Henderson, Farbow, Garrett &  
ADDRESSEE: Dunner  
STREET: 1300 I Street, N.W., Suite 700  
CITY: Washington  
STATE: D.C.  
ZIP: 20005-3315  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy Disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/484,905  
FILING DATE: 07-JUNE-1995  
CLASSIFICATION: 530  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/801,818

FILING DATE: 05-DEC-1991  
CLASSIFICATION: 530  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/792,473  
FILING DATE: 15-NOV-1991  
CLASSIFICATION: 530  
ATTORNEY/AGENT INFORMATION:  
NAME: Potter, Jane E. R.  
REGISTRATION NUMBER: 33,332  
REFERENCE/DOCKET NUMBER: 03495.0106-03000  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 202-408-4000  
TELEFAX: 202-408-4400  
INFORMATION FOR SEQ ID NO: 35:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 16 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-484-905-35

Query Match 100.0%; Score 39; DB 2; Length 16;  
Best Local Similarity 100.0%; Pred. No. 0.077;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
Db 9 RAFVTIGK 16

RESULT 81  
US-08-481-985B-35  
Sequence 35, Application US/08481985B  
Patent No. 6011146  
GENERAL INFORMATION:  
APPLICANT: Motiez, Estelle  
APPLICANT: Abastredo, Jean-Pierre  
APPLICANT: Kourilsky, Philippe  
TITLE OF INVENTION: Altered Major Histocompatibility Complex  
NUMBER OF SEQUENCES: 148  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Finnegan, Henderson, Farbow, Garrett &  
STREET: 1300 I Street, N.W., Suite 700  
CITY: Washington  
STATE: D.C.  
ZIP: 20005-3315  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/481,985B  
FILING DATE: 07-JUN-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/801,818  
FILING DATE: 05-DEC-1991  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/792,473  
FILING DATE: 15-NOV-1991  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Meyers, Kenneth J.  
REGISTRATION NUMBER: 25,146  
REFERENCE/DOCKET NUMBER: 03495.0106-04000  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 202-408-4000  
TELEFAX: 202-408-4400  
INFORMATION FOR SEQ ID NO: 35:

SEQUENCE CHARACTERISTICS:  
LENGTH: 16 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-481-985B-35

Query Match 100.0%; Score 39; DB 3; Length 16;  
Best Local Similarity 100.0%; Pred. No. 0.077;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
Db 9 RAFVTIGK 16

RESULT 82  
US-09-248-082-2  
Sequence 2, Application US/09248082  
Patent No. 6015564  
GENERAL INFORMATION:  
APPLICANT: BOUTILLON, CHRISTOPHE; MARTINON,  
APPLICANT: FREDERIC; GRAS-MASSE, HELENE;  
APPLICANT: GOMARD, ELISABETH; SERGHERAERT,  
APPLICANT: CHRISTIAN; MAGNE, REMY; TARTAR,  
APPLICANT: ANDRE; LEVY, JEAN-PAUL  
TITLE OF INVENTION: CYTOTOXIC T LYMPHOCYTE  
NUMBER OF SEQUENCES: 11  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: BIERMAN & MUSERLIAN  
STREET: 600 THIRD AVENUE  
CITY: NEW YORK  
STATE: NEW YORK  
COUNTRY: USA  
ZIP: 10016  
COMPUTER READABLE FORM:  
MEDIUM TYPE: FLOPPY DISK  
COMPUTER: IBM PC COMPATIBLE  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: ASCII  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/248,082  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/251,472  
FILING DATE: 31-MAY-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: MUSERLIAN, CHARLES A  
REGISTRATION NUMBER: 19,683  
REFERENCE/DOCKET NUMBER: 102.1511  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 661-8000  
TELEFAX: (212) 661-8002  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 16  
TYPE: amino acid  
STRANDEDNESS: unknown  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
ORIGINAL SOURCE:  
ORGANISM: HIV-1  
FEATURE:  
LOCATION: ENV 312-327  
US-09-248-082-2

Query Match 100.0%; Score 39; DB 3; Length 16;  
Best Local Similarity 100.0%; Pred. No. 0.077;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFTTICK 8  
| | | | |  
Db 9 RAFTTICK 16

RESULT 83  
US-08-370-476-35  
Sequence 35, Application US/08370476  
Patent No. 6153408  
GENERAL INFORMATION:  
APPLICANT: Mottez, Estelle  
APPLICANT: Abastado, Jean-Pierre  
APPLICANT: Kourilsky, Philippe  
APPLICANT: Lome, Yu-Chun  
APPLICANT: Ojcius, David  
APPLICANT: Castrouge, Armenda  
TITLE OF INVENTION: Altered Major Histocompatibility Complex  
TITLE OF INVENTION:  
NUMBER OF SEQUENCES: 127  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Flinnegan, Henderson, Farabow, Garrett &  
ADDRESSEE: Dunner  
STREET: 1300 I Street, N.W., Suite 700  
City: Washington  
STATE: D.C.  
ZIP: 20005-3315  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/370,476  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/117,575  
FILING DATE: 07-SEP-1993  
APPLICATION NUMBER: US 08/072,787  
FILING DATE: 06-JUN-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/801,818  
FILING DATE: 05-DEC-1991  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/792,473  
FILING DATE: 15-NOV-1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Meyers, Kenneth J.  
REGISTRATION NUMBER: 25,146  
REFERENCE/DOCKET NUMBER: 05243.0001-01000  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 202-408-4000  
TELEFAX: 202-408-4400  
INFORMATION FOR SEQ ID NO: 35:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 16 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-370-476-35

Query Match 100.0%; Score 39; DB 3; Length 16;  
Best Local Similarity 100.0%; Pred. No. 0.077;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFTTICK 8  
| | | | |  
Db 9 RAFTTICK 16

RESULT 84  
US-08-992-877-15  
Sequence 15, Application US/08992877

Patent No. 6340461  
GENERAL INFORMATION:  
APPLICANT: Terman, David S  
TITLE OF INVENTION: SUPERANTIGEN BASED METHODS AND COMPOSITIONS FOR  
TREATMENT OF INFECTIOUS DISEASE  
FILE REFERENCE: superantigen  
CURRENT APPLICATION NUMBER: US/08/992,877  
CURRENT FILING DATE: 1997-12-17  
PRIOR APPLICATION NUMBER: 60/044,074  
PRIOR FILING DATE: 1997-04-17  
NUMBER OF SEQ ID NOS: 78  
SOFTWARE: Patentin Ver. 2.1  
SEQ ID NO 15  
LENGTH: 16  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: antigen  
US-08-992-877-15

Query Match 100.0%; Score 39; DB 3; Length 16;  
Best Local Similarity 100.0%; Pred. No. 0.077;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFTTICK 8  
| | | | |  
Db 9 RAFTTICK 16

RESULT 85  
PCT-US94-02539-28  
Sequence 28, Application PC/TUS9402539  
GENERAL INFORMATION:  
APPLICANT: Brate, E.M.  
APPLICANT: Brennan, C.A.  
APPLICANT: Bridon, D.P.  
APPLICANT: Jaffe, K.D.  
APPLICANT: Krafft, G.A.  
APPLICANT: Mandelki, W.  
APPLICANT: March, S.C.  
APPLICANT: Russell, J.R.  
APPLICANT: Yue, V.T.  
TITLE OF INVENTION: Genetically Engineered Enzymes  
TITLE OF INVENTION: And Their  
TITLE OF INVENTION: Conjugates For Diagnostic Assays  
NUMBER OF SEQUENCES: 34  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: ABBOTT LABORATORIES  
STREET: One Abbott Park Road  
CITY: Abbott Park  
STATE: Illinois  
COUNTRY: USA  
ZIP: 60064-3500  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: SoftPC  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/02539  
FILING DATE:  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Wong, Wean King  
REGISTRATION NUMBER: 33,561  
REFERENCE/DOCKET NUMBER: 5324.PC.01  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (708) 938-3517  
TELEFAX: (708) 938-2623  
TELEX:  
INFORMATION FOR SEQ ID NO: 28:  
SEQUENCE CHARACTERISTICS:

LENGTH: 16 amino acid residues  
TYPE: amino acid  
STRANDEDNESS:  
TOPOLOGY: unknown  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM:  
PCT-US94-02539-28

Query Match 100.0%; Score 39; DB 5; Length 16;  
Best Local Similarity 100.0%; Pred. No. 0.077;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8  
| | | | |  
DB 9 RAFTVIGK 16

RESULT 86  
US-08-015-770B-4  
Sequence 4, Application US/08015770B  
Patent No. 5683695

GENERAL INFORMATION:  
APPLICANT: Shen, De Fen  
APPLICANT: Wang, Chang Yi  
TITLE OF INVENTION: Production of recombinant proteins  
TITLE OF INVENTION: containing multiple antigenic determinants linked by  
TITLE OF INVENTION: flexible domains  
NUMBER OF SEQUENCES: 73  
CORRESPONDENCE ADDRESS:  
ADDRESSES: United Biomedical, Inc.  
STREET: 25 Davids Drive  
CITY: Hauppauge  
STATE: NY  
COUNTRY: USA  
ZIP: 11788

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/015,770B  
FILING DATE: 10-FEB-1993  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Wilson, M. Lisa  
REGISTRATION NUMBER: 34,045  
REFERENCE/DOCKET NUMBER: 2002  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (516)273-2828  
TELEFAX: (516)273-1717  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 18 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-015-770B-4

Query Match 100.0%; Score 39; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 0.086;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8  
| | | | |  
DB 11 RAFTVIGK 18

RESULT 87  
US-08-121-054C-3  
Sequence 3, Application US/08121054C  
Patent No. 5637481

GENERAL INFORMATION:  
APPLICANT: Ledbetter, Jeffrey A.  
APPLICANT: Gilliland, Lisa K.  
APPLICANT: Hayden, Martha S.  
APPLICANT: Linsley, Peter S.  
APPLICANT: Bajorath, Jürgen  
APPLICANT: Fell, Perry  
TITLE OF INVENTION: Expression Vectors Encoding Bispecific  
TITLE OF INVENTION: Fusion Proteins and Methods of Producing Biologically  
TITLE OF INVENTION: Active Bispecific Fusion Proteins in a Mammalian Cell  
NUMBER OF SEQUENCES: 30  
CORRESPONDENCE ADDRESS:  
ADDRESSES: Merchant & Gould  
STREET: 1150 Santa Monica Blvd., Suite 400  
CITY: Los Angeles  
STATE: CA  
COUNTRY: USA  
ZIP: 90025

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/121,054C

FILING DATE: 13-SEP-1993

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/013,420

FILING DATE: 01-FEB-1993

ATTORNEY/AGENT INFORMATION:

NAME: Adriano, Sarah B.

REGISTRATION NUMBER: 34,470

REFERENCE/DOCKET NUMBER: 30436.18US01

TELECOMMUNICATION INFORMATION:

TELEPHONE: 310-445-9031

TELEFAX: 310-445-9031

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:

LENGTH: 20 amino acids

TYPE: amino acid

STRANDEDNESS:

TOPOLOGY: linear

MOLECULE TYPE: peptide  
US-08-121-054C-3

Query Match 100.0%; Score 39; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 0.096;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8  
| | | | |  
DB 12 RAFTVIGK 19

RESULT 88  
US-08-488-252-28  
Sequence 28, Application US/08488252  
Patent No. 5763160

GENERAL INFORMATION:  
APPLICANT: Chang Yi Wang  
TITLE OF INVENTION: SYNTHETIC PEPTIDES AND PROCESS  
TITLE OF INVENTION: OF USING SAME FOR THE DETECTION OF ANTIBODIES TO  
TITLE OF INVENTION: HUMAN IMMUNODEFICIENCY VIRUS (HIV) GP120 ENVELOPE  
TITLE OF INVENTION: PROTEIN, DIAGNOSIS OF AIDS AND PRE-AIDS CONDITIONS  
NUMBER OF SEQUENCES: 38  
CORRESPONDENCE ADDRESS:  
ADDRESSES: MORGAN & FINNEGAN  
STREET: 345 PARK AVE.  
CITY: NEW YORK  
STATE: NEW YORK  
COUNTRY: USA

ZIP: 10154  
COMPUTER READABLE FORM:  
MEDIUM TYPE: FLOPPY DISK  
COMPUTER: IBM PC COMPATIBLE  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: WORDPERFECT 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/488,252  
FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/326,676  
FILING DATE: 07-Jun-1995  
APPLICATION NUMBER: 07/726,605  
FILING DATE: 09-July-1991  
APPLICATION NUMBER: 07/663,262  
FILING DATE: 01-Mar-1991  
APPLICATION NUMBER: 07/155,321  
FILING DATE: 12-Feb-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Maria C. H. Lin  
REGISTRATION NUMBER: 29,323  
REFERENCE/DOCKET NUMBER: 1151-4004 US4  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212-758-4800  
TELEFAX: (212) 751-6849  
TELEX: 421792  
INFORMATION FOR SEQ ID NO: 28:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 amino acids  
TYPE: Amino acids  
STRANDEDNESS:  
TOPOLOGY: Unknown  
US-08-488-252-28

Query Match 100.0%; Score 39; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 0.096;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYTK 8  
DB 13 RAFTYTK 20

RESULT 89  
US-08-539-436-3  
Sequence 3, Application US/08539436  
Patent No. 613292  
GENERAL INFORMATION:  
APPLICANT: Ledbetter, Jeffrey A.  
APPLICANT: Gilliland, Lisa K.  
APPLICANT: Hayden, Martha S.  
APPLICANT: Linsley, Peter S.  
APPLICANT: Bajorath, Jürgen  
APPLICANT: Fell, Perry  
TITLE OF INVENTION: Expression Vectors Encoding Bispecific  
TITLE OF INVENTION: Fusion Proteins and Methods of Producing Biologically  
TITLE OF INVENTION: Active Bispecific Fusion Proteins in a Mammalian Cell  
NUMBER OF SEQUENCES: 30  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Merchant & Gould  
STREET: 11150 Santa Monica Blvd., Suite 400  
CITY: Los Angeles  
STATE: CA  
COUNTRY: USA  
ZIP: 90025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/539,436

FILING DATE: 05-OCT-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/121,054  
FILING DATE: 13-SEP-1993  
APPLICATION NUMBER: US 08/013,420  
FILING DATE: 01-FEB-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Adriano, Sarah B.  
REGISTRATION NUMBER: 34,470  
REFERENCE/DOCKET NUMBER: 30436.18US01  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 310-445-1140  
TELEFAX: 310-445-9031  
INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 amino acid  
TYPE: amino acid  
STRANDEDNESS:  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-539-436-3

Query Match 100.0%; Score 39; DB 3; Length 20;  
Best Local Similarity 100.0%; Pred. No. 0.096;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYTK 8  
DB 12 RAFTYTK 19

RESULT 90  
US-09-813-659-3  
Sequence 3, Application US/09813659  
Patent No. 6482919  
GENERAL INFORMATION:  
APPLICANT: Ledbetter, Jeffrey A.  
APPLICANT: Hayden, Martha S.  
APPLICANT: Linsley, Peter S.  
APPLICANT: Bajorath, Jürgen  
APPLICANT: Fell, H. Perry  
APPLICANT: Gilliland, Lisa K.  
TITLE OF INVENTION: EXPRESSION VECTORS-ENCODING BISPECIFIC FUSION PROTEINS  
TITLE OF INVENTION: AND METHODS OF PRODUCING BIOLOGICALLY ACTIVE BISPECIFIC  
TITLE OF INVENTION: FUSION PROTEINS IN A MAMMALIAN CELL  
FILE REFERENCE: 30436.18USD2  
CURRENT APPLICATION NUMBER: US/09/813,659  
CURRENT FILING DATE: 2001-03-21  
PRIOR APPLICATION NUMBER: 09/549,067  
PRIOR FILING DATE: 2000-04-13  
PRIOR APPLICATION NUMBER: 08/539,436  
PRIOR FILING DATE: 1995-10-05  
PRIOR APPLICATION NUMBER: 08/121,054  
PRIOR FILING DATE: 1993-09-13  
PRIOR APPLICATION NUMBER: 08/013,420  
PRIOR FILING DATE: 1993-02-01  
NUMBER OF SEQ ID NOS: 32  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 3  
LENGTH: 20  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-813-659-3

Query Match 100.0%; Score 39; DB 4; Length 20;  
Best Local Similarity 100.0%; Pred. No. 0.096;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYTK 8  
DB 12 RAFTYTK 19

```
RESULT 91
US-09-549-067A-3
; Sequence 3, Application US/09549067A
; Patent No. 6623940
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden, Martha S.
; APPLICANT: Linsley, Peter S.
; APPLICANT: Bajorath, Jürgen
; APPLICANT: Fell, H. Perry
; APPLICANT: Gilliland, Lisa K.
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING BISPECIFIC FUSION PROTEINS
; TITLE OF INVENTION: AND METHODS OF PRODUCING BIOLOGICALLY ACTIVE BISPECIFIC
; FILE REFERENCE: 30436.18US01
; CURRENT APPLICATION NUMBER: US/09/549,067A
; PRIOR FILING DATE: 2000-04-13
; PRIOR APPLICATION NUMBER: 08/539,436
; PRIOR FILING DATE: 1995-10-05
; PRIOR APPLICATION NUMBER: 08/121,054
; PRIOR FILING DATE: 1993-09-13
; PRIOR APPLICATION NUMBER: 08/013,420
; PRIOR FILING DATE: 1993-02-01
; PRIOR APPLICATION NUMBER: 08/228,208
; PRIOR FILING DATE: 1994-04-15
; PRIOR APPLICATION NUMBER: 08/008,898
; PRIOR FILING DATE: 1993-01-22
; PRIOR APPLICATION NUMBER: 07/723,617
; PRIOR FILING DATE: 1991-06-27
; NUMBER OF SEQ ID NOS: 35
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-549-067A-3

Query Match      100.0%; Score 39; DB 4; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Q# 1 RAFTTIGK 8
Db 12 RAFTTIGK 19

RESULT 92
US-08-452-503A-4
; Sequence 4, Application US/08452503A
; Patent No. 5849475
; GENERAL INFORMATION:
; APPLICANT: Rovinski, Benjamin
; APPLICANT: Haynes, Joel
; APPLICANT: Cao, Shi Xian
; APPLICANT: Klein, Michel H
; TITLE OF INVENTION: Retrovirus-like Particles Containing
; TITLE OF INVENTION: Modified Envelope Glycoproteins
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: 330 University Avenue, 6th Floor
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5G 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/452,503A
```

```
; FILING DATE: 30-MAY-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/073,526
; FILING DATE: 09-JAN-1993
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Stewart, Michael I
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-447 MTS:as
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-452-503A-4

Query Match      100.0%; Score 39; DB 2; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Q# 1 RAFTTIGK 8
Db 14 RAFTTIGK 21

RESULT 93
US-08-453-745A-4
; Sequence 4, Application US/08453745A
; Patent No. 5866137
; GENERAL INFORMATION:
; APPLICANT: Rovinski, Benjamin
; APPLICANT: Haynes, Joel
; APPLICANT: Cao, Shi Xian
; APPLICANT: Klein, Michel H
; TITLE OF INVENTION: Retrovirus-like Particles Containing
; TITLE OF INVENTION: Modified Envelope Glycoproteins
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: 330 University Avenue, 6th Floor
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5G 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/453,745A
; FILING DATE: 30-MAY-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/073,526
; FILING DATE: 09-JAN-1993
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Stewart, Michael I
; REGISTRATION NUMBER: 24,773
; REFERENCE/DOCKET NUMBER: 1038-445 MTS:as
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 amino acids
; TYPE: amino acid
```

STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-453-745A-4

Query Match 100.0%; Score 39; DB 2; Length 21;  
Best Local Similarity 100.0%; Pred. No. 0.1;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTICK 8  
DB 14 RAFTTICK 21

RESULT 94  
US-08-470-419-25  
Sequence 25; Application US/08470419  
Patent No. 5866320  
GENERAL INFORMATION:  
APPLICANT: ROVINSKI, Benjamin  
APPLICANT: CAO, Shi-Xian  
APPLICANT: YAO, Fei-Long  
APPLICANT: PERSSON, Roy  
APPLICANT: KLEIN, Michael H  
TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIONOUS  
TITLE OF INVENTION: RETROVIRUS-LIKE PARTICLES  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/470,419  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/290,105  
FILING DATE: August 15, 1994  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, Michael I  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-385 MTS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-470-419-25

Query Match 100.0%; Score 39; DB 2; Length 21;  
Best Local Similarity 100.0%; Pred. No. 0.1;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTICK 8  
DB 14 RAFTTICK 21

RESULT 95  
US-08-648-298-18  
Sequence 18; Application US/08648298  
Patent No. 5871990

GENERAL INFORMATION:  
APPLICANT: Henrik Paul Clausen  
APPLICANT: Eric Paul Bennett  
TITLE OF INVENTION: UDP-N-acetyl-alpha-D-galactosamine:polypeptide  
TITLE OF INVENTION: N-acetyl-galactosaminyltransferase GalNAc-T3  
NUMBER OF SEQUENCES: 19  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Darby & Darby PC  
STREET: 805 Third Avenue  
CITY: New York  
STATE: NY  
ZIP: 10022  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: Patent in Release #1.0, Version #1.30 (BPO)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/648,298  
FILING DATE: 15-JUN-1996  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Green, Reza  
REGISTRATION NUMBER: 38,475  
REFERENCE/DOCKET NUMBER: 4035/08865  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212527700  
TELEFAX: 2127536237  
TELEX: 236687  
INFORMATION FOR SEQ ID NO: 18:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 amino acids  
TYPE: peptide  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: Homo sapiens  
IMMEDIATE SOURCE:  
CLONE: HIV-V3 acceptor peptide  
US-08-648-298-18

Query Match 100.0%; Score 39; DB 2; Length 21;  
Best Local Similarity 100.0%; Pred. No. 0.1;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTICK 8  
DB 10 RAFTTICK 17

RESULT 96  
US-08-761-828-25  
Sequence 25; Application US/08761828  
Patent No. 5879925  
GENERAL INFORMATION:  
APPLICANT: ROVINSKI, Benjamin  
APPLICANT: CAO, Shi-Xian  
APPLICANT: YAO, Fei-Long  
APPLICANT: PERSSON, Roy  
APPLICANT: KLEIN, Michael H  
TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIONOUS RETROVIRUS-LIKE PARTICLES  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: 6TH Floor, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/761,828  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/290,105  
FILING DATE: 15-AUG-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, Michael I  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-655 MIS:jb  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-761-828-25

Query Match 100.0%; Score 39; DB 2; Length 21;  
Best Local Similarity 100.0%; Pred. No. 0.1;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTIGK 8  
DB 14 RAFTTIGK 21

RESULT 97  
US-08-452-520B-4  
Sequence 4, Application US/08452520B  
Patent No. 5912338 5840872  
GENERAL INFORMATION:  
APPLICANT: Rovinski, Benjamin  
APPLICANT: Haynes, Joel  
APPLICANT: Cao, Shi Xian  
APPLICANT: Klein, Michel H  
TITLE OF INVENTION: Retrovirus-Like Particles Containing  
TITLE OF INVENTION: Modified Envelope Glycoproteins  
NUMBER OF SEQUENCES: 7  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: 330 University Avenue, 6th Floor  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/452,520B  
FILING DATE: 30-MAY-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/073,526  
FILING DATE: 09-JAN-1993  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Stewart, Michael I  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-446 MIS:as  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163

INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-452-520B-4

Query Match 100.0%; Score 39; DB 2; Length 21;  
Best Local Similarity 100.0%; Pred. No. 0.1;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTIGK 8  
DB 14 RAFTTIGK 21

RESULT 98  
US-08-290-105-25  
Sequence 25, Application US/08290105  
Patent No. 5955342  
GENERAL INFORMATION:  
APPLICANT: ROVINSKI, Benjamin  
APPLICANT: CAO, Shi-Xian  
APPLICANT: YAO, Pei-long  
APPLICANT: PERSSON, Roy  
APPLICANT: KLEIN, Michel H  
TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIONOUS  
TITLE OF INVENTION: RETROVIRUS-LIKE PARTICLES  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/290,105  
FILING DATE: August 15, 1994  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, Michael I  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-385 MIS:jb  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-290-105-25

Query Match 100.0%; Score 39; DB 2; Length 21;  
Best Local Similarity 100.0%; Pred. No. 0.1;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTIGK 8  
DB 14 RAFTTIGK 21

RESULT 99  
US-08-776-949-25  
Sequence 25, Application US/08776949



Patent No. 6025125  
GENERAL INFORMATION:  
APPLICANT: Rovinski, Benjamin  
APPLICANT: Cao, Shi-Xian  
APPLICANT: Yao, Fei-Long  
APPLICANT: Persson, Roy  
APPLICANT: Klein, Michel H  
TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIONOUS  
TITLE OF INVENTION: RETROVIRUS-LIKE PARTICLES  
NUMBER OF SEQUENCES: 31  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: 6th Floor, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/776,949  
FILING DATE: 02-JUN-1997  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Stewart, Michael I  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-673 MTS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-776-949-25

Query Match 100.0%; Score 39; DB 3; Length 21;  
Best Local Similarity 100.0%; Pred. No. 0.1;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
Db 14 RAFTYICK 21

RESULT 100  
US-08-482-810-25  
Sequence 25, Application US/08482810  
Patent No. 6080408  
GENERAL INFORMATION:  
APPLICANT: ROVINSKI, Benjamin  
APPLICANT: CAO, Shi-Xian  
APPLICANT: YAO, Fei-Long  
APPLICANT: PERSSON, Roy  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: RETROVIRUS-LIKE PARTICLES MADE NON-  
TITLE OF INVENTION: INFECTIONOUS BY A PLURALITY OF MUTATIONS  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/482,810  
FILING DATE: 07-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/292,967  
FILING DATE: 22-AUG-1994  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, Michael I  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-490 MTS:vg  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-482-810-25

Query Match 100.0%; Score 39; DB 3; Length 21;  
Best Local Similarity 100.0%; Pred. No. 0.1;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
Db 14 RAFTYICK 21

RESULT 101  
US-09-027-955-25  
Sequence 25, Application US/09027955  
Patent No. 6291157  
GENERAL INFORMATION:  
APPLICANT: ROVINSKI, Benjamin  
APPLICANT: CAO, Shi-Xian  
APPLICANT: YAO, Fei-Long  
APPLICANT: PERSSON, Roy  
APPLICANT: KLEIN, Michel H  
TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIONOUS  
TITLE OF INVENTION: RETROVIRUS-LIKE PARTICLES  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: 6th Floor, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/027,955  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/290,105  
FILING DATE: 15-AUG-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, Michael I  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-798 MTS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163

INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-09-027-955-25

Query Match 100.0%; Score 39; DB 3; Length 21;  
Best Local Similarity 100.0%; Pred. No. 0.1;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTVIGK 8  
Db 14 RAFTVIGK 21

RESULT 102  
US-09-636-805-25

Sequence 25, Application US/09636805  
Patent No. 6342228  
GENERAL INFORMATION:

APPLICANT: ROVINSKI, Benjamin

CAO, Shi-Xian

YAO, Fei-Long

PERSSON, Roy

KLEIN, Michel H

TITLE OF INVENTION: RETROVIRUS-LIKE PARTICLES

NUMBER OF SEQUENCES: 26

CORRESPONDENCE ADDRESSES:

ADDRESSEE: Sim & McBurney

STREET: 6th Floor, 330 University Avenue

CITY: Toronto

STATE: Ontario

COUNTRY: Canada

ZIP: M5G 1R7

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/636,805

FILING DATE: 10-Aug-2000

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 09/027,955

FILING DATE: 23-FEB-1998

ATTORNEY/AGENT INFORMATION:

NAME: STEWART, Michael I

REGISTRATION NUMBER: 24,973

REFERENCE/DOCKET NUMBER: 1038-1068 MIS:jb

TELECOMMUNICATION INFORMATION:

TELEPHONE: (416) 595-1155

TELEFAX: (416) 595-1163

INFORMATION FOR SEQ ID NO: 25:

SEQUENCE CHARACTERISTICS:

LENGTH: 21 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

SEQUENCE DESCRIPTION: SEQ ID NO: 25:

Query Match 100.0%; Score 39; DB 3; Length 21;  
Best Local Similarity 100.0%; Pred. No. 0.1;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTVIGK 8  
Db 14 RAFTVIGK 21

RESULT 103  
US-09-258-128-25

Sequence 25, Application US/09258128  
Patent No. 6451322  
GENERAL INFORMATION:

APPLICANT: ROVINSKI, Benjamin

APPLICANT: CAO, Shi-Xian

APPLICANT: YAO, Fei-Long

APPLICANT: PERSSON, Roy

APPLICANT: KLEIN, Michel H

TITLE OF INVENTION: RETROVIRUS-LIKE PARTICLES MADE NON-  
INFECTIOUS BY A PLURALITY OF MUTATIONS

NUMBER OF SEQUENCES: 26

CORRESPONDENCE ADDRESSES:

ADDRESSEE: Sim & McBurney

STREET: 6th Floor, 330 University Avenue

CITY: Toronto

STATE: Ontario

COUNTRY: Canada

ZIP: M5G 1R7

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/258,128

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/292,967

FILING DATE: 22-AUG-1994

ATTORNEY/AGENT INFORMATION:

NAME: STEWART, Michael I

REGISTRATION NUMBER: 24,973

REFERENCE/DOCKET NUMBER: 1038-924 MIS:jb

TELECOMMUNICATION INFORMATION:

TELEPHONE: (416) 595-1155

TELEFAX: (416) 595-1163

INFORMATION FOR SEQ ID NO: 25:

SEQUENCE CHARACTERISTICS:

LENGTH: 21 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

US-09-258-128-25

Query Match 100.0%; Score 39; DB 4; Length 21;  
Best Local Similarity 100.0%; Pred. No. 0.1;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTVIGK 8  
Db 14 RAFTVIGK 21

RESULT 104  
US-09-635-754-25

Sequence 25, Application US/09635754  
Patent No. 6518030  
GENERAL INFORMATION:

APPLICANT: ROVINSKI, Benjamin

CAO, Shi-Xian

YAO, Fei-Long

PERSSON, Roy

KLEIN, Michel H

TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIOUS  
RETROVIRUS-LIKE PARTICLES

NUMBER OF SEQUENCES: 26

CORRESPONDENCE ADDRESSES:

ADDRESSEE: Sim & McBurney

STREET: 6th Floor, 330 University Avenue

CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/635,754  
FILING DATE: 10-Aug-2000  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 09/027,955  
FILING DATE: 23-FEB-1998  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, Michael I  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-1065 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
SEQUENCE DESCRIPTION: SEQ ID NO: 25:  
US-09-635-754-25

Query Match 100.0%; Score 39; DB 4; Length 21;  
Best Local Similarity 100.0%; Pred. No. 0.1;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
DB 14 RAFTYICK 21

RESULT 105  
US-08-680-525-25  
Sequence 25: Application US/08680525  
Patent No. 6544327  
GENERAL INFORMATION:  
APPLICANT: ROVINSKI, Benjamin  
APPLICANT: CAO, Shi-Xian  
APPLICANT: YAO, Fei-Long  
APPLICANT: PERSSON, Roy  
APPLICANT: KLEIN, Michel H  
TITLE OF INVENTION: RETROVIRUS-LIKE PARTICLES MADE NON-  
TITLE OF INVENTION: INFECTIOUS BY A PLURALITY OF MUTATIONS  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/680,525  
FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/292,967  
FILING DATE: 22-AUG-1994

ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, Michael I  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-617 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-680-525-25

Query Match 100.0%; Score 39; DB 4; Length 21;  
Best Local Similarity 100.0%; Pred. No. 0.1;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
DB 14 RAFTYICK 21

RESULT 106  
US-09-636-223-25  
Sequence 25: Application US/09636223  
Patent No. 6544752  
GENERAL INFORMATION:  
APPLICANT: ROVINSKI, Benjamin  
APPLICANT: CAO, Shi-Xian  
APPLICANT: YAO, Fei-Long  
APPLICANT: PERSSON, Roy  
APPLICANT: KLEIN, Michel H  
TITLE OF INVENTION: ANTIGENICALLY-MARKED NON-INFECTIOUS  
TITLE OF INVENTION: RETROVIRUS-LIKE PARTICLES  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: 6th Floor, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/636,223  
FILING DATE: 29-Dec-2000  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 09/027,955  
FILING DATE: 23-FEB-1998  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, Michael I  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-1064 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
SEQUENCE DESCRIPTION: SEQ ID NO: 25:  
US-09-636-223-25

Query Match 100.0%; Score 39; DB 4; Length 21;

Best Local Similarity 100.0%; Pred. No. 0.1;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVITIG 8  
11111111  
DB 14 RAFVITIG 21

## RESULT 107

US-08-125-012-13  
; Sequence 13, Application US/08125012  
; Patent No. 5593972  
; GENERAL INFORMATION:  
; APPLICANT: Weiner, David B.  
; APPLICANT: Williams, William V.  
; APPLICANT: Wang, Bin  
; APPLICANT: Coney, Leslie R.  
; TITLE OF INVENTION: Genetic Immunization  
; NUMBER OF SEQUENCES: 34  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5593972rls  
; STREET: One Liberty Place 46th Floor  
; CITY: Philadelphia  
; STATE: Pennsylvania  
; COUNTRY: USA  
; ZIP: 19103  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25 mb-MD/JAF  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/125,012  
; FILING DATE:  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/029,336  
; FILING DATE: 11-MAR-1993  
; NAME: Deluca, Mark  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Deluca, Mark  
; REGISTRATION NUMBER: 33,229  
; REFERENCE/DOCKET NUMBER: APOL-0013  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 215-568-3100  
; TELEFAX: 215-568-3429  
; INFORMATION FOR SEQ ID NO: 13:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 22 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; US-08-125-012-13

Query Match 100.0%; Score 39; DB 1; Length 22;

Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVITIG 8  
11111111  
DB 15 RAFVITIG 22

## RESULT 108

US-08-783-818-13  
; Sequence 13, Application US/08783818  
; Patent No. 5817637  
; GENERAL INFORMATION:  
; APPLICANT: Weiner, David B.

APPLICANT: Williams, William V.

APPLICANT: Wang, Bin

APPLICANT: Coney, Leslie R.

TITLE OF INVENTION: Genetic Immunization

NUMBER OF SEQUENCES: 34

CORRESPONDENCE ADDRESS:

ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5817637rls

STREET: One Liberty Place 46th Floor

CITY: Philadelphia

STATE: Pennsylvania

COUNTRY: USA

ZIP: 19103

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25 mb-MD/JAF

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/783,818

FILING DATE: 13-JAN-1997

CLASSIFICATION: 514

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/125,012

FILING DATE: 21-SEP-1993

APPLICATION NUMBER: 08/029,336

FILING DATE: 11-MAR-1993

CLASSIFICATION: 514

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/008,342

FILING DATE: 26-JAN-1993

CLASSIFICATION: 514

ATTORNEY/AGENT INFORMATION:

NAME: Deluca, Mark

REGISTRATION NUMBER: 33,229

REFERENCE/DOCKET NUMBER: APOL-0013

TELECOMMUNICATION INFORMATION:

TELEPHONE: 215-568-3100

TELEFAX: 215-568-3429

INFORMATION FOR SEQ ID NO: 13:

SEQUENCE CHARACTERISTICS:

LENGTH: 22 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-783-818-13

Query Match 100.0%; Score 39; DB 2; Length 22;

Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVITIG 8  
11111111  
DB 15 RAFVITIG 22

## RESULT 109

US-08-453-349-13  
; Sequence 13, Application US/08453349  
; Patent No. 5830876  
; GENERAL INFORMATION:  
; APPLICANT: Weiner, David B.  
; APPLICANT: Williams, William V.  
; APPLICANT: Wang, Bin  
; TITLE OF INVENTION: Genetic Immunization  
; NUMBER OF SEQUENCES: 34  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5830876rls  
; STREET: One Liberty Place 46th Floor  
; CITY: Philadelphia  
; STATE: Pennsylvania  
; COUNTRY: USA  
; ZIP: 19103  
; COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25 mb-MD/JAF  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/453,349  
FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/029,336  
FILING DATE: March 11, 1993  
APPLICATION NUMBER: 08/008,342  
FILING DATE: January 26, 1993  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: Deluca, Mark  
REGISTRATION NUMBER: 33,229  
REFERENCE/DOCKET NUMBER: APOI-0013  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 215-568-3100  
TELEFAX: 215-568-3429  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 22 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-453-349-13

Query Match 100.0%; Score 39; DB 2; Length 22;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFYTIK 8  
Db 15 RAFYTIK 22

RESULT 110  
US-08-345-321-2  
Sequence 2, Application US/08345321  
Patent No. 5914109  
GENERAL INFORMATION:  
APPLICANT: ZOILA-PAZNER, Susan  
APPLICANT: GORRY, Miroslav K.  
TITLE OF INVENTION: HETEROHYBRIDOMAS PRODUCING HUMAN  
TITLE OF INVENTION: MONOCLONAL ANTIBODIES TO HIV-1  
NUMBER OF SEQUENCES: 22  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Browdy and Neimark  
STREET: 419 Seventh Street, N.W., Suite 300  
CITY: Washington  
STATE: D.C.  
COUNTRY: USA  
ZIP: 20004  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/345,321  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/07/872,675  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Browdy, Roger L.  
REGISTRATION NUMBER: 25,618  
REFERENCE/DOCKET NUMBER: ZOILA-PAZNER1B  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 202-628-5197

TELEFAX: 202-737-3528  
TELEX: 248633  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 22 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
ORIGINAL SOURCE:  
ORGANISM: Homo sapiens  
INDIVIDUAL ISOLATE: IIB  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1-22  
OTHER INFORMATION: /note= "This sequence corresponds  
OTHER INFORMATION: to 303 to 324 of gp120 from the IIB isolate."  
US-08-345-321-2

Query Match 100.0%; Score 39; DB 2; Length 22;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFYTIK 8  
Db 13 RAFYTIK 20

RESULT 111  
US-08-979-385B-11  
Sequence 11, Application US/08979385B  
Patent No. 5981505  
GENERAL INFORMATION:  
APPLICANT: Weiner, David B.  
APPLICANT: Williams, William V.  
APPLICANT: Wang, Bin  
TITLE OF INVENTION: Compositions and Methods for Delivery of  
NUMBER OF SEQUENCES: 52  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5981505r1b  
STREET: One Liberty Place 46th Floor  
CITY: Philadelphia  
STATE: Pennsylvania  
COUNTRY: USA  
ZIP: 19103  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25 mb-MD/JAF  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/979,385B  
FILING DATE: 26-NOV-1997  
CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/495,684  
FILING DATE: 28-SEP-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/00899  
FILING DATE: 26-JAN-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/125,012  
FILING DATE: 21-SEP-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/124,962  
FILING DATE: 21-SEP-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/093,235  
FILING DATE: 15-JUL-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/029,336  
FILING DATE: 11-MAR-1993  
PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/008,342  
FILING DATE: 26-JAN-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Deluca, Mark  
REGISTRATION NUMBER: 33,229  
REFERENCE/DOCKET NUMBER: UPAP-0253  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 215-568-3100  
TELEFAX: 215-568-3429  
INFORMATION FOR SEQ ID NO: 11:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 22 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-979-385B-11

Query Match 100.0%; Score 39; DB 2; Length 22;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
DB 15 RAFVTIGK 22

RESULT 112  
US-08-537-245-1  
Sequence 1, Application US/08537245  
Patent No. 5985275  
GENERAL INFORMATION:  
APPLICANT: Neureath, A. Robert, Debnath, Asim K.,  
TITLE OF INVENTION: Proteins and Peptides Modified By  
NUMBER OF SEQUENCES: 1  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Frisshauf, Holtz, Goodman & Woodward  
STREET: 600 Third Avenue  
CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10016  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3+ inch, 0.72 mb storage  
COMPUTER: IBM PC  
OPERATING SYSTEM: MS DOS  
SOFTWARE: ASCII  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/537,245  
FILING DATE:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/420,573  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Barth, Richard  
REGISTRATION NUMBER: 28,180  
REFERENCE/DOCKET NUMBER: 950157/RB  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 972-1400  
TELEFAX: (212) 370-1622  
TELEX: 236268  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 22 amino acids  
TYPE: amino acid  
STRANDEDNESS: single stranded  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA to genomic RNA  
US-08-537-245-1

Query Match 100.0%; Score 39; DB 2; Length 22;  
Best Local Similarity 100.0%; Pred. No. 0.11;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
DB 15 RAFVTIGK 22

RESULT 113  
US-08-805-889-5  
Sequence 5, Application US/08805889  
Patent No. 6039957  
GENERAL INFORMATION:  
APPLICANT: Earl, Patricia L.  
APPLICANT: Broder, Christopher C.  
TITLE OF INVENTION: Oligomeric HIV-1 Envelope Glycoproteins  
NUMBER OF SEQUENCES: 6  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Knobbe, Martens, Olson and Bear  
STREET: 620 Newport Center Drive 16th Floor  
CITY: Newport Beach  
STATE: CA  
ZIP: 92660  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/805,889  
FILING DATE: 03-MAR-1997  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/165,314  
FILING DATE: 10-DEC-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Fuller, Michael L.  
REGISTRATION NUMBER: 36,516  
REFERENCE/DOCKET NUMBER: NIH079.001A  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 619-235-8550  
TELEFAX: 619-235-0176  
INFORMATION FOR SEQ ID NO: 5:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 22 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
FRAGMENT TYPE: Internal  
US-08-805-889-5

Query Match 100.0%; Score 39; DB 3; Length 22;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTIGK 8  
DB 15 RAFVTIGK 22

RESULT 114  
US-09-070-291-5  
Sequence 5, Application US/09070291  
Patent No. 6171596  
GENERAL INFORMATION:  
APPLICANT: Earl, Patricia L.  
APPLICANT: Broder, Christopher C.  
APPLICANT: Doms, Robert W.  
APPLICANT: Moss, Bernard  
TITLE OF INVENTION: Oligomeric HIV-1 Envelope Glycoproteins

NUMBER OF SEQUENCES: 10  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Knobbe, Martens, Olson and Bear  
STREET: 620 Newport Center Drive 16th Floor  
CITY: Newport Beach  
STATE: CA  
ZIP: 92660  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/070,291  
FILING DATE:  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Vensko, Nancy WAYS  
REGISTRATION NUMBER: 36,298  
REFERENCE/DOCKET NUMBER: NIH079.1DVCPI  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 619-235-8550  
TELEFAX: 619-235-0176  
INFORMATION FOR SEQ ID NO: 5:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 22 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
FRAGMENT TYPE: Internal  
US-09-070-291-5

Query Match 100.0%; Score 39; DB 3; Length 22;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTTGK 8  
| | | | |  
Db 15 RAFVTTGK 22

RESULT 115  
US-09-217-306B-22  
Sequence 22, Application US/09217306B  
Patent No. 6465220  
GENERAL INFORMATION:  
APPLICANT: Hasean, Helie  
APPLICANT: Clausen, Henrik  
APPLICANT: Bennett, Eric P.  
TITLE OF INVENTION: Glycosylation Using GalNac-T4 Transferase  
FILE REFERENCE: 8850\*1  
CURRENT APPLICATION NUMBER: US/09/217,306B  
CURRENT FILING DATE: 1998-12-21  
NUMBER OF SEQ ID NOS: 25  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 22  
LENGTH: 22  
TYPE: PRT  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: MISC\_FEATURE  
OTHER INFORMATION: HIVIIB gp120  
US-09-217-306B-22

Query Match 100.0%; Score 39; DB 4; Length 22;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RAFVTTGK 8  
| | | | |

Db 10 RAFVTTGK 17

RESULT 116  
US-08-880-576-13  
Sequence 13, Application US/08880576  
Patent No. 6468982  
GENERAL INFORMATION:  
APPLICANT: Weiner, David B.  
APPLICANT: Williams, William V.  
APPLICANT: Wang, Bin  
APPLICANT: Coney, Leslie R.  
TITLE OF INVENTION: Genetic Immunization  
NUMBER OF SEQUENCES: 34  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 6468982-13  
STREET: One Liberty Place 46th Floor  
CITY: Philadelphia  
STATE: Pennsylvania  
COUNTRY: USA  
ZIP: 19103  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25 mb-MD/JAF  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/880,576  
FILING DATE: 23-JUN-1997  
CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/125,012  
FILING DATE: 21-SEP-1993  
APPLICATION NUMBER: 08/029,336  
FILING DATE: 11-MAR-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/008,342  
FILING DATE: 26-JAN-1993  
CLASSIFICATION: 514  
ATTORNEY/AGENT INFORMATION:  
NAME: DeLuca, Mark  
REGISTRATION NUMBER: 33,229  
REFERENCE/DOCKET NUMBER: APOI-0013  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 215-568-3100  
TELEFAX: 215-568-3429  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 22 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-880-576-13

Query Match 100.0%; Score 39; DB 4; Length 22;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTTGK 8  
| | | | |  
Db 15 RAFVTTGK 22

RESULT 117  
US-08-097-751-1  
Sequence 1, Application US/08097751  
Patent No. 5527666  
GENERAL INFORMATION:  
APPLICANT: DeRosa, Anita  
APPLICANT: Pauci, Marcelia  
APPLICANT: Mammano, Fabrizio  
APPLICANT: Panozzo, Marina  
APPLICANT: Dettin, Monica

APPLICANT: Dibello, Carlo  
APPLICANT: Chieco-Bianchi, Luigi  
TITLE OF INVENTION: METHOD FOR THE DIAGNOSIS IN VITRO OF  
TITLE OF INVENTION: HIV-1 VIRUS INFECTIONS  
NUMBER OF SEQUENCES: 2  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Hedman, Gibson, Costigan & Hoare  
STREET: 1185 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage  
COMPUTER: IBM PS/2  
OPERATING SYSTEM: DOS  
SOFTWARE: Word Perfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/097,751  
FILING DATE: 19930723  
CLASSIFICATION: 530  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER:  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Costigan, James V.  
REGISTRATION NUMBER: 25, 669  
REFERENCE/DOCKET NUMBER: 515-4026  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 302-8989  
TELEFAX: (212) 302-8998  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
TOPOLOGY: circular  
US-08-097-751-1

Query Match 100.0%; Score 39; DB 1; Length 24;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTTGK 8  
Db 15 RAFVTTGK 22

RESULT 118  
US-08-090-148-6  
Sequence 6, Application US/08090148  
Patent No. 5534257  
GENERAL INFORMATION:  
APPLICANT: Mastico, Robert Allan  
APPLICANT: Stockley, Peter George  
APPLICANT: Talbot, Simon John  
TITLE OF INVENTION: Antigen-Presenting Capsid with  
NUMBER OF SEQUENCES: 6  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Rosenman & Colin  
STREET: 575 Madison Avenue  
CITY: New York  
STATE: NY  
COUNTRY: U.S.A.  
ZIP: 10022-2585  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.5", 1.44Mb  
COMPUTER: IBM PS2-486  
OPERATING SYSTEM: MS-DOS  
SOFTWARE: WordPerfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/090,148  
FILING DATE: 08/11/93

CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: GB 9101550.3  
FILING DATE: 01/24/91  
APPLICATION NUMBER: PCT/GB92/00124  
FILING DATE: 01/22/92  
ATTORNEY/AGENT INFORMATION:  
NAME: Nissenbaum, Israel  
REGISTRATION NUMBER: 27,582  
REFERENCE/DOCKET NUMBER:  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 940-8636  
TELEFAX: (212) 940-6404  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 AMINO ACIDS  
TYPE: AMINO ACID  
TOPOLOGY: NOT RELEVANT  
MOLECULE TYPE: PEPTIDE  
US-08-090-148-6

Query Match 100.0%; Score 39; DB 1; Length 24;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTTGK 8  
Db 15 RAFVTTGK 22

RESULT 119  
US-08-257-528B-99  
Sequence 99, Application US/08257528B  
Patent No. 5639854  
GENERAL INFORMATION:  
APPLICANT: SIA, Charles D.Y.  
APPLICANT: CHONG, Pete  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/257,528B  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-336 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1153  
INFORMATION FOR SEQ ID NO: 99:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-257-528B-99

Query Match 100.0%; Score 39; DB 1; Length 24;  
Best Local Similarity 100.0%; Pred. No. 0.11;



Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTICK 8  
DB 14 RAFTTICK 21

RESULT 120  
US-08-460-602A-99  
; Sequence 99, Application US/08460602A  
; Patent No. 5759769  
; GENERAL INFORMATION:  
; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
; NUMBER OF SEQUENCES: 101  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: Suite 701, 330 University Avenue  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: MSG 1R7  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/460,602A  
; FILING DATE: 02-JUN-1995  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/257,528  
; FILING DATE: 09-JUN-1994  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/073,378  
; FILING DATE: 09-JUN-1993  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: STEWART, MICHAEL I.  
; REGISTRATION NUMBER: 24,973  
; TELEPHONE: (416) 595-1155  
; TELEFAX: (416) 595-1153  
; INFORMATION FOR SEQ ID NO: 99:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 24 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-460-602A-99

Query Match 100.0%; Score 39; DB 1; Length 24;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTICK 8  
DB 14 RAFTTICK 21

RESULT 121  
US-08-463-966A-99  
; Sequence 99, Application US/08463966A  
; Patent No. 5795855  
; GENERAL INFORMATION:  
; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; APPLICANT: KLEIN, Michel H.

TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: MSG 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/463,966A  
FILING DATE: 05-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/257,528  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/073,378  
FILING DATE: 09-JUN-1993  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-487 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1153  
INFORMATION FOR SEQ ID NO: 99:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-463-966A-99

Query Match 100.0%; Score 39; DB 1; Length 24;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTICK 8  
DB 14 RAFTTICK 21

RESULT 122  
US-08-465-217A-99  
; Sequence 99, Application US/08465217A  
; Patent No. 5800822  
; GENERAL INFORMATION:  
; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; APPLICANT: KLEIN, Michel H.  
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
; NUMBER OF SEQUENCES: 101  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: Suite 701, 330 University Avenue  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: MSG 1R7  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/465,217A  
FILING DATE: 05-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/257,528  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/073,378  
FILING DATE: 09-JUN-1993  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-486 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 99:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-465-217A-99

Query Match 100.0%; Score 39; DB 1; Length 24;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTYICK 8  
Db 14 RAFTYICK 21

RESULT 123  
US-08-464-329A-99  
Sequence 99, Application US/08464329A  
Patent No. 5817754  
GENERAL INFORMATION:  
APPLICANT: SIA, Charles D.Y.  
APPLICANT: CHONG, Pele  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/464,329A  
FILING DATE: 05-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/257,528  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/073,378  
FILING DATE: 09-JUN-1993  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-449 MIS:jb

TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 99:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-464-329A-99

Query Match 100.0%; Score 39; DB 2; Length 24;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTYICK 8  
Db 14 RAFTYICK 21

RESULT 124  
US-08-493-235-24  
Sequence 24, Application US/08493235  
Patent No. 5840313  
GENERAL INFORMATION:  
APPLICANT: Vahine, Anders  
APPLICANT: Svennerholm, Bo  
APPLICANT: Rymo, Lars  
APPLICANT: Jeansson, Stig  
APPLICANT: Horal, Peter  
TITLE OF INVENTION: PEPTIDES FOR USE IN VACCINATION AND  
INDUCTION OF NEUTRALIZING ANTIBODIES AGAINST HUMAN  
NUMBER OF SEQUENCES: 41  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: KNOBE, MARTENS, OLSON AND BEAR  
STREET: 620 NEWPORT CENTER DRIVE 16TH FLOOR  
CITY: NEWPORT BEACH  
STATE: CA  
COUNTRY: USA  
ZIP: 92660  
COMPUTER READABLE FORM:  
MEDIUM TYPE: floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/493,235  
FILING DATE: 20(June)1995  
CLASSIFICATION: 530  
ATTORNEY/AGENT INFORMATION:  
NAME: Kaiser, Annemarie  
REGISTRATION NUMBER: 37,649  
REFERENCE/DOCKET NUMBER: METRICS.12CPC1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 619-235-8550  
TELEFAX: 619-235-0176  
INFORMATION FOR SEQ ID NO: 24:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
FRAGMENT TYPE: internal  
US-08-493-235-24

Query Match 100.0%; Score 39; DB 2; Length 24;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFYTIK 8  
|||  
Db 9 RAFYTIK 16

## RESULT 125

US-08-462-507A-99  
Sequence 99, Application US/08462507A  
Patent No. 5876731  
GENERAL INFORMATION:  
APPLICANT: SIA, Charles D.Y.  
APPLICANT: CHONG, Pele  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/462,507A  
FILING DATE: 05-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/257,528  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: 1038-451 MIS:jb  
FILING DATE: 09-JUN-1993  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-451 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 99:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-462-507A-99

Query Match 100.0%; Score 39; DB 2; Length 24;  
Best Local Similarity 100.0%; Pred. No. 0.11; 0; Indels 0; Gaps 0;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFYTIK 8  
|||  
Db 14 RAFYTIK 21

RESULT 126  
US-08-146-028-160  
Sequence 160, Application US/08146028  
Patent No. 5891640  
GENERAL INFORMATION:  
APPLICANT:  
TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES  
CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR  
TITLE OF INVENTION: IN A PROCESS FOR DETERMINATION OF ANTIBODIES OR BIOTINYLATED  
TITLE OF INVENTION: PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES,

TITLE OF INVENTION: PROCESS FOR PREPARING THEM AND COMPOSITIONS CONTAINING THEM  
NUMBER OF SEQUENCES: 453  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/146,028  
INFORMATION FOR SEQ ID NO: 160:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-146-028-160

Query Match 100.0%; Score 39; DB 2; Length 24;  
Best Local Similarity 100.0%; Pred. No. 0.11; 0; Indels 0; Gaps 0;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFYTIK 8  
|||  
Db 15 RAFYTIK 22

RESULT 127  
US-08-467-881A-99  
Sequence 99, Application US/08467881A  
Patent No. 5951986  
GENERAL INFORMATION:  
APPLICANT: SIA, Charles D.Y.  
APPLICANT: CHONG, Pele  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/467,881A  
FILING DATE: 06-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/257,528  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: 1038-488 MIS:jb  
FILING DATE: 09-JUN-1993  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-488 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 99:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
STRANDEDNESS: single

TOPOLOGY: linear  
US-08-467-881A-99

Query Match  
Best Local Similarity 100.0%; Score 39; DB 2; Length 24;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVITIGK 8  
DB 14 RAFVITIGK 21

RESULT 128  
US-08-723-425A-160  
Sequence 160, Application US/08723425A  
Patent No. 6165730

GENERAL INFORMATION:  
APPLICANT: DELETYS, ROBERT  
TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF  
TITLE OF INVENTION: PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT  
TITLE OF INVENTION: EPITOPES AND THEIR USE IN A PROCESS FOR DETERMINATION OF  
TITLE OF INVENTION: ANTIBODIES OR BIOTINYLATED PEPTIDES CORRESPONDING ...  
NUMBER OF SEQUENCES: 453  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: NIXON & VANDERHAYE, P.C.  
STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR  
CITY: Arlington  
STATE: VA  
COUNTRY: USA  
ZIP: 22201

COMPUTER READABLE FORM:  
MEDIUM TYPE: floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/723,425A  
FILING DATE:  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: SADOFF, B.J.  
REGISTRATION NUMBER: 36,663  
REFERENCE/DOCKET NUMBER: 1487-13  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-816-4000  
TELEFAX: 703-816-4100

INFORMATION FOR SEQ ID NO: 160:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-723-425A-160

Query Match  
Best Local Similarity 100.0%; Score 39; DB 3; Length 24;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVITIGK 8  
DB 15 RAFVITIGK 22

RESULT 129  
US-08-480-332-2  
Sequence 2, Application US/08480332  
Patent No. 6180134

GENERAL INFORMATION:  
APPLICANT: Zalipsky, Samuel, Woodie, Martin, Martin, Francis,  
APPLICANT: Barenholz, Yecheskel  
TITLE OF INVENTION: Enhanced Circulation Effector Composition and  
TITLE OF INVENTION: Method

NUMBER OF SEQUENCES: 10  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Dehlinger & Associates  
STREET: 350 Cambridge Avenue, Suite 250  
CITY: Palo Alto  
STATE: CA  
COUNTRY: USA  
ZIP: 94306

COMPUTER READABLE FORM:  
MEDIUM TYPE: floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/480,332  
FILING DATE: 7-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/316,436  
FILING DATE: 29-SEP-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/035,443  
FILING DATE: 23-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Mohr, Judy M.  
REGISTRATION NUMBER: 38,563  
REFERENCE/DOCKET NUMBER: 5325-0115.31  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 324-0880  
TELEFAX: (415) 324-0960

INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
STRANDEDNESS: unknown  
TOPOLOGY: unknown  
MOLECULE TYPE: peptide  
HYPOTHEICAL: NO  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
INDIVIDUAL ISOLATE: Peptide 2, Fig. 13  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 1..15

US-08-480-332-2

Query Match  
Best Local Similarity 100.0%; Score 39; DB 3; Length 24;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVITIGK 8  
DB 15 RAFVITIGK 22

RESULT 130  
US-09-112-206-160  
Sequence 160, Application US/09112206  
Patent No. 6210903

GENERAL INFORMATION:  
APPLICANT:  
TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES  
TITLE OF INVENTION: CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR  
TITLE OF INVENTION: IN A PROCESS FOR DETERMINATION OF ANTIBODIES OR BIOTINYLATED  
TITLE OF INVENTION: PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES,  
TITLE OF INVENTION: PROCESS FOR PREPARING THEM AND COMPOSITIONS CONTAINING THEM  
NUMBER OF SEQUENCES: 453  
COMPUTER READABLE FORM:  
MEDIUM TYPE: floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)  
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/112,206  
FILING DATE:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/146,028  
FILING DATE:  
INFORMATION FOR SEQ ID NO: 160:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-09-112-206-160

Query Match 100.0%; Score 39; DB 3; Length 24;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
Db 15 RAFTYICK 22

## RESULT 131

US-09-790-497A-14  
Sequence 14, Application US/09790497A  
Patent No. 6649735  
GENERAL INFORMATION:  
APPLICANT: De Leys, Robert  
TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING  
TITLE OF INVENTION: TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN  
TITLE OF INVENTION: A PROCESS FOR DETERMINATION OF ANTIBODIES OF  
TITLE OF INVENTION: BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT  
TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS  
FILE REFERENCE: 2752-16  
CURRENT APPLICATION NUMBER: US/09/790,497A  
CURRENT FILING DATE: 2001-02-23  
PRIOR APPLICATION NUMBER: 09/576,824  
PRIOR FILING DATE: 2000-05-23  
PRIOR APPLICATION NUMBER: 08/723,425  
PRIOR FILING DATE: 1996-09-30  
PRIOR APPLICATION NUMBER: 09/146,028  
PRIOR FILING DATE: 1993-11-22  
PRIOR APPLICATION NUMBER: PCT/EP93/00517  
PRIOR FILING DATE: 1993-03-08  
PRIOR APPLICATION NUMBER: EP 92400598.6  
PRIOR FILING DATE: 1992-03-06  
NUMBER OF SEQ ID NOS: 600  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 14  
LENGTH: 24  
TYPE: PRT  
ORGANISM: Human immunodeficiency virus  
US-09-790-497A-14

Query Match 100.0%; Score 39; DB 4; Length 24;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
Db 15 RAFTYICK 22

RESULT 132  
US-09-790-497A-160  
Sequence 160, Application US/09790497A  
Patent No. 6649735  
GENERAL INFORMATION:  
APPLICANT: De Leys, Robert  
TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING  
TITLE OF INVENTION: TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN

TITLE OF INVENTION: A PROCESS FOR DETERMINATION OF ANTIBODIES OF  
TITLE OF INVENTION: BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT  
TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS  
TITLE OF INVENTION: CONTAINING THEM  
FILE REFERENCE: 2752-16  
CURRENT APPLICATION NUMBER: US/09/790,497A  
CURRENT FILING DATE: 2001-02-23  
PRIOR APPLICATION NUMBER: 09/576,824  
PRIOR FILING DATE: 2000-05-23  
PRIOR APPLICATION NUMBER: 08/723,425  
PRIOR FILING DATE: 1996-09-30  
PRIOR APPLICATION NUMBER: 09/146,028  
PRIOR FILING DATE: 1993-11-22  
PRIOR APPLICATION NUMBER: PCT/EP93/00517  
PRIOR FILING DATE: 1993-03-08  
PRIOR APPLICATION NUMBER: EP 92400598.6  
PRIOR FILING DATE: 1992-03-06  
NUMBER OF SEQ ID NOS: 600  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 160  
LENGTH: 24  
TYPE: PRT  
ORGANISM: Human immunodeficiency virus  
US-09-790-497A-160

Query Match 100.0%; Score 39; DB 4; Length 24;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
Db 15 RAFTYICK 22

RESULT 133  
US-09-576-824A-160  
Sequence 160, Application US/09576824A  
Patent No. 6667387  
GENERAL INFORMATION:  
APPLICANT: De Leys, Robert  
TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING  
TITLE OF INVENTION: TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN  
TITLE OF INVENTION: A PROCESS FOR DETERMINATION OF ANTIBODIES OF  
TITLE OF INVENTION: BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT  
TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS  
FILE REFERENCE: 2752-11  
CURRENT APPLICATION NUMBER: US/09/576,824A  
CURRENT FILING DATE: 2000-05-23  
PRIOR APPLICATION NUMBER: 08/723,425  
PRIOR FILING DATE: 1996-09-30  
PRIOR APPLICATION NUMBER: 09/146,028  
PRIOR FILING DATE: 1993-11-22  
PRIOR APPLICATION NUMBER: PCT/EP93/00517  
PRIOR FILING DATE: 1993-03-08  
PRIOR APPLICATION NUMBER: EP 92400598.6  
PRIOR FILING DATE: 1992-03-06  
NUMBER OF SEQ ID NOS: 600  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 160  
LENGTH: 24  
TYPE: PRT  
ORGANISM: Human immunodeficiency virus  
US-09-576-824A-160

Query Match 100.0%; Score 39; DB 4; Length 24;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
Db 15 RAFTYICK 22

RESULT 134  
US-09-680-497-160  
Sequence 160, Application US/09680497  
Patent No. 6709828  
GENERAL INFORMATION:  
APPLICANT:  
TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES  
TITLE OF INVENTION: CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT PEPTIDES AND THEIR  
TITLE OF INVENTION: IN A PROCESS FOR DETERMINATION OF ANTIBODIES OR BIOTINYLATED  
TITLE OF INVENTION: PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT PEPTIDES,  
NUMBER OF SEQUENCES: 453  
PROCESS FOR PREPARING THEM AND COMPOSITIONS CONTAINING THEM  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/680,497  
FILING DATE: 06-OCT-2000  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/08/146,028  
FILING DATE: 22-NOV-1993  
INFORMATION FOR SEQ ID NO: 160:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-09-680-497-160

Query Match 100.0%; Score 39; DB 4; Length 24;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTIGK 8  
DB 15 RAFTTIGK 22

RESULT 135  
PCT-US92-06688-12  
Sequence 12, Application PC/TUS9206688  
GENERAL INFORMATION:  
APPLICANT: REPLIGEN CORPORATION  
APPLICANT: THE ROCKEFELLER UNIVERSITY  
TITLE OF INVENTION: MULTIPLE ANTIGEN PEPTIDES FOR USE AS HIV  
TITLE OF INVENTION: VACCINES  
NUMBER OF SEQUENCES: 21  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Fish & Richardson  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: Massachusetts  
COUNTRY: U.S.A.  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
COMPUTER: IBM PS/2 Model 502 or 55SX  
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)  
SOFTWARE: WordPerfect (Version 5.1)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US92/06688  
FILING DATE: 19920811  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 744,281  
FILING DATE: 13 August 1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Paul T. Clark  
REGISTRATION NUMBER: 30,162

REFERENCE/DOCKET NUMBER: 00231/052M01  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (617) 542-5070  
TELEFAX: (617) 542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 12:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24  
TYPE: AMINO ACID  
TOPOLOGY: linear  
PCT-US92-06688-12

Query Match 100.0%; Score 39; DB 5; Length 24;  
Best Local Similarity 100.0%; Pred. No. 0.11;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTIGK 8  
DB 15 RAFTTIGK 22

RESULT 136  
PCT-US92-10378-3  
Sequence 3, Application PC/TUS9210378  
GENERAL INFORMATION:  
APPLICANT: BOARD OF REGENTS, THE UNIVERSITY OF  
APPLICANT: TEXAS SYSTEM  
APPLICANT: SASTRY, Jagannadha K.  
APPLICANT: ARLINGHAUS, Ralph B.  
APPLICANT: PLATSOUCAS, Chris D.  
APPLICANT: NEHESTE, Pramod N.  
TITLE OF INVENTION: METHODS AND COMPOSITIONS  
TITLE OF INVENTION: FOR ELICITING IMMUNE OR ANTI-INFECTION RESPONSES  
NUMBER OF SEQUENCES: 7  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Arnold, White & Durkee  
STREET: P.O. Box 4433  
CITY: Houston  
STATE: Texas  
COUNTRY: US  
ZIP: 77210  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: WordPerfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US92/10378  
FILING DATE: 19921202  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/800,932  
FILING DATE: December 2, 1991  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/945865  
FILING DATE: September 16, 1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Parker, David L.  
REGISTRATION NUMBER: 32,165  
REFERENCE/DOCKET NUMBER: UFFC305PCT  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 512-320-7200  
TELEFAX: 512-474-7577  
TELEX: Not Applicable  
INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: AMINO ACID  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
PCT-US92-10378-3

Query Match 100.0%; Score 39; DB 5; Length 24;  
Best Local Similarity 100.0%; Pred. No. 0.11; Indels 0; Gaps 0;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
Db 15 RAFTYICK 22

## RESULT 137

US-07-950-571A-1  
; Sequence 1, Application US/07950571A  
; Patent No. 5854400  
; GENERAL INFORMATION:  
; APPLICANT: Chang, Tse Wen, Fung, Michael S.C., Sun, Bill N.C., Sun, Cecily R.Y.  
; TITLE OF INVENTION: Monoclonal Antibodies which Neutralize HIV-1 Infection  
; NUMBER OF SEQUENCES: 8  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Tanox Biotechnology, Inc.  
; STREET: 10301 Stella Link Rd.  
; CITY: Houston  
; STATE: Texas  
; COUNTRY: USA  
; ZIP: 77025  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5" 5 1/4 Density Diskette  
; OPERATING SYSTEM: DOS, Version 3.30  
; SOFTWARE: Wordperfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/07/950,571A  
; FILING DATE: 19920922  
; CLASSIFICATION: 435  
; PRIOR APPLICATION NUMBER:  
; APPLICATION NUMBER: No. 5854400 07/767,533  
; FILING DATE: 09/26/1991  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Mirabel, Eric P.  
; REGISTRATION NUMBER: 31,211  
; REFERENCE/DOCKET NUMBER: TXN87-11BBC  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 713-664-2288  
; TELEFAX: 713-664-8914  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 25 amino acids  
; TYPE: AMINO ACID  
; TOPOLOGY: Linear  
; US-07-950-571A-1

Query Match 100.0%; Score 39; DB 2; Length 25;  
Best Local Similarity 100.0%; Pred. No. 0.12; Indels 0; Gaps 0;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
Db 18 RAFTYICK 25

## RESULT 138

US-08-266-448-1  
; Sequence 1, Application US/08266448  
; Patent No. 5876724  
; GENERAL INFORMATION:  
; APPLICANT: GIRARD, Marc  
; TITLE OF INVENTION: INDUCTION OF PROTECTION AGAINST VIRAL  
; TITLE OF INVENTION: INFECTION BY SYNERGY BETWEEN VIRUS ENVELOPE GLYCOPROTEIN  
; AND PEPTIDES CORRESPONDING TO NEUTRALIZATION EPITOPES OF  
; THE GLYCOPROTEIN  
; NUMBER OF SEQUENCES: 23  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: PINNEGAN, HENDERSON, FARABOW, GARRETT &

ADDRESSEE: DUNNER, L.L.P.  
STREET: 1300 I Street, N.W.  
CITY: Washington  
STATE: D.C.  
COUNTRY: U.S.A.  
ZIP: 20005

## COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/266,448  
; FILING DATE: 28-JUN-1994  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/145,664  
; FILING DATE: 04-NOV-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/782,241  
; FILING DATE: 28-OCT-1991  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/672,647  
; FILING DATE: 18-MAR-1991  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/494,749  
; FILING DATE: 19-MAR-1990  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Meyers, Kenneth J.  
; REGISTRATION NUMBER: 25,146  
; REFERENCE/DOCKET NUMBER: 03495.0088-13  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (202) 408-4132  
; TELEFAX: (202) 408-4400  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 25 amino acids  
; TYPE: amino acid  
; STRANDEDNESS:  
; TOPOLOGY: not relevant  
; MOLECULE TYPE: peptide  
; US-08-266-448-1

Query Match 100.0%; Score 39; DB 2; Length 25;  
Best Local Similarity 100.0%; Pred. No. 0.12; Indels 0; Gaps 0;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
Db 15 RAFTYICK 22

## RESULT 139

US-08-485-324-13  
; Sequence 13, Application US/08485324  
; Patent No. 6043093  
; GENERAL INFORMATION:  
; APPLICANT: Wohlstadter, Jacob  
; TITLE OF INVENTION: SELECTION METHODS  
; NUMBER OF SEQUENCES: 31  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Curtis, Morris, & Safford  
; ADDRESS: c/o Barry Evans  
; STREET: 530 Fifth Avenue  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10036  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/485,324  
FILING DATE: 07-JUN-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/235,437  
FILING DATE: 29-APR-1994  
APPLICATION NUMBER: US 07/852,412  
FILING DATE: 16-MAR-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Evans, Barty  
REGISTRATION NUMBER: 22,802  
REFERENCE/DOCKET NUMBER: 370132-2000  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 840-3333  
TELEFAX: (212) 840-0712  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 25 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-485-324-13

Query Match 100.0%; Score 39; DB 3; Length 25;  
Best Local Similarity 100.0%; Pred. No. 0.12;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
|||  
Db 15 RAFVTIGK 22

RESULT 140  
US-08-485-324-31  
Sequence 31, Application US/08485324  
Patent No. 6043093  
GENERAL INFORMATION:  
APPLICANT: Mohlstadter, Jacob  
TITLE OF INVENTION: SELECTION METHODS  
NUMBER OF SEQUENCES: 31  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Curtis, Morris, & Safford  
ADDRESS: c/o Barty Evans  
STREET: 530 Fifth Avenue  
CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/485,324  
FILING DATE: 07-JUN-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/235,437  
FILING DATE: 29-APR-1994  
APPLICATION NUMBER: US 07/852,412  
FILING DATE: 16-MAR-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Evans, Barty  
REGISTRATION NUMBER: 22,802  
REFERENCE/DOCKET NUMBER: 370132-2000  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 840-3333  
TELEFAX: (212) 840-0712  
INFORMATION FOR SEQ ID NO: 31:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 25 amino acids

TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-485-324-31

Query Match 100.0%; Score 39; DB 3; Length 25;  
Best Local Similarity 100.0%; Pred. No. 0.12;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
|||  
Db 15 RAFVTIGK 22

RESULT 141  
US-08-447-506-13  
Sequence 13, Application US/08447506  
Patent No. 6066499  
GENERAL INFORMATION:  
APPLICANT: Mohlstadter, Jacob  
TITLE OF INVENTION: SELECTION METHODS  
NUMBER OF SEQUENCES: 31  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Curtis, Morris, & Safford  
ADDRESS: c/o Barty Evans  
STREET: 530 Fifth Avenue  
CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/447,506  
FILING DATE: 23-MAY-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/235,437  
FILING DATE: 29-APR-1994  
APPLICATION NUMBER: US 07/852,412  
FILING DATE: 16-MAR-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Evans, Barty  
REGISTRATION NUMBER: 22,802  
REFERENCE/DOCKET NUMBER: 370132-2000  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 840-3333  
TELEFAX: (212) 840-0712  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 25 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-447-506-13

Query Match 100.0%; Score 39; DB 3; Length 25;  
Best Local Similarity 100.0%; Pred. No. 0.12;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
|||  
Db 15 RAFVTIGK 22

RESULT 142  
US-08-447-506-31  
Sequence 31, Application US/08447506  
Patent No. 6066499  
GENERAL INFORMATION:



```

: APPLICANT: Mohlstadter, Jacob
: TITLE OF INVENTION: SELECTION METHODS
: NUMBER OF SEQUENCES: 31
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Curtis, Morris, & Safford
: ADDRESSEE: c/o Barry Evans
: STREET: 530 Fifth Avenue
: CITY: New York
: STATE: New York
: COUNTRY: USA
: ZIP: 10036
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patentin Release #1.0, Version #1.25
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/447,506
: FILING DATE: 23-MAY-1995
: CLASSIFICATION: 435
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 08/235,437
: FILING DATE: 29-APR-1994
: APPLICATION NUMBER: US 07/852,412
: FILING DATE: 16-MAR-1992
: ATTORNEY/AGENT INFORMATION:
: NAME: Evans, Barry
: REGISTRATION NUMBER: 22,802
: REFERENCE/DOCKET NUMBER: 370132-2000
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (212) 840-3333
: TELEFAX: (212) 840-0712
: INFORMATION FOR SEQ ID NO: 31:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 25 amino acids
: TYPE: amino acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: US-08-447-506-31

Query Match      100.0%; Score 39; DB 3; Length 25;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RAFTICK 8
Db      15 RAFTICK 22

RESULT 143
: US-08-235-437-13
: Sequence 13, Application US/08235437
: Patent No. 6087177
: GENERAL INFORMATION:
: APPLICANT: Mohlstadter, Jacob
: TITLE OF INVENTION: SELECTION METHODS
: NUMBER OF SEQUENCES: 31
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Curtis, Morris, & Safford
: ADDRESSEE: c/o Barry Evans
: STREET: 530 Fifth Avenue
: CITY: New York
: STATE: New York
: COUNTRY: USA
: ZIP: 10036
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patentin Release #1.0, Version #1.25
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/235,437
: FILING DATE: 29-APR-1994
```

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: CLASSIFICATION: 435
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/852,412
: FILING DATE: 16-MAR-1992
: ATTORNEY/AGENT INFORMATION:
: NAME: Evans, Barry
: REGISTRATION NUMBER: 22,802
: REFERENCE/DOCKET NUMBER: 370132-2000
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (212) 840-3333
: TELEFAX: (212) 840-0712
: INFORMATION FOR SEQ ID NO: 13:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 25 amino acids
: TYPE: amino acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: US-08-235-437-13

Query Match      100.0%; Score 39; DB 3; Length 25;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RAFTICK 8
Db      15 RAFTICK 22

RESULT 144
: US-08-235-437-31
: Sequence 31, Application US/08235437
: Patent No. 6087177
: GENERAL INFORMATION:
: APPLICANT: Mohlstadter, Jacob
: TITLE OF INVENTION: SELECTION METHODS
: NUMBER OF SEQUENCES: 31
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Curtis, Morris, & Safford
: ADDRESSEE: c/o Barry Evans
: STREET: 530 Fifth Avenue
: CITY: New York
: STATE: New York
: COUNTRY: USA
: ZIP: 10036
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patentin Release #1.0, Version #1.25
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/235,437
: FILING DATE: 29-APR-1994
: CLASSIFICATION: 435
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/852,412
: FILING DATE: 16-MAR-1992
: ATTORNEY/AGENT INFORMATION:
: NAME: Evans, Barry
: REGISTRATION NUMBER: 22,802
: REFERENCE/DOCKET NUMBER: 370132-2000
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (212) 840-3333
: TELEFAX: (212) 840-0712
: INFORMATION FOR SEQ ID NO: 31:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 25 amino acids
: TYPE: amino acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: US-08-235-437-31

Query Match      100.0%; Score 39; DB 3; Length 25;
Best Local Similarity 100.0%; Pred. No. 0.12;
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Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RAFTTICK 8  
Db 15 RAFTTICK 22

RESULT 145  
US-08-447-515-13  
Sequence 13, Application US/08447515  
Patent No. 6162640  
GENERAL INFORMATION:  
APPLICANT: Mohlstadter, Jacob  
TITLE OF INVENTION: SELECTION METHODS  
NUMBER OF SEQUENCES: 31  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Curtis, Morris, & Safford  
ADDRESSEE: c/o Barry Evans  
STREET: 530 Fifth Avenue  
CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/447,515  
FILING DATE: 23-MAY-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/235,437  
FILING DATE: 29-APR-1994  
APPLICATION NUMBER: US 07/852,412  
FILING DATE: 16-MAR-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Evans, Barry  
REGISTRATION NUMBER: 22,802  
REFERENCE/DOCKET NUMBER: 370132-2000  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 840-3333  
TELEFAX: (212) 840-0712  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 25 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-447-515-13

Query Match 100.0%; Score 39; DB 3; Length 25;  
Best Local Similarity 100.0%; Pred. No. 0.12;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RAFTTICK 8  
Db 15 RAFTTICK 22

RESULT 146  
US-08-447-515-31  
Sequence 31, Application US/08447515  
Patent No. 6162640  
GENERAL INFORMATION:  
APPLICANT: Mohlstadter, Jacob  
TITLE OF INVENTION: SELECTION METHODS  
NUMBER OF SEQUENCES: 31  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Curtis, Morris, & Safford  
ADDRESSEE: c/o Barry Evans  
STREET: 530 Fifth Avenue

CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/447,515  
FILING DATE: 23-MAY-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/235,437  
FILING DATE: 29-APR-1994  
APPLICATION NUMBER: US 07/852,412  
FILING DATE: 16-MAR-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Evans, Barry  
REGISTRATION NUMBER: 22,802  
REFERENCE/DOCKET NUMBER: 370132-2000  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 840-3333  
TELEFAX: (212) 840-0712  
INFORMATION FOR SEQ ID NO: 31:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 25 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-447-515-31

Query Match 100.0%; Score 39; DB 3; Length 25;  
Best Local Similarity 100.0%; Pred. No. 0.12;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RAFTTICK 8  
Db 15 RAFTTICK 22

RESULT 147  
US-09-593-870A-31  
Sequence 31, Application US/09593870A  
Patent No. 6548643  
GENERAL INFORMATION:  
APPLICANT: McKenzie, Ian F.C.  
APPLICANT: Apostolopoulos, Vasso  
APPLICANT: Pietersz, Geoff Allan  
TITLE OF INVENTION: Antigen Carbohydrate Compounds and Their  
FILE REFERENCE: 2368-McKenzie  
CURRENT APPLICATION NUMBER: US/09/593,870A  
CURRENT FILING DATE: 2000-06-14  
PRIOR APPLICATION NUMBER: 09/223,043  
PRIOR FILING DATE: 1998-12-30  
NUMBER OF SEQ ID NOS: 69  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 31  
LENGTH: 25  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-593-870A-31

Query Match 100.0%; Score 39; DB 4; Length 25;  
Best Local Similarity 100.0%; Pred. No. 0.12;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RAFTTICK 8  
Db 12 RAFTTICK 19

RESULT 148  
US-08-455-625-17  
Sequence 17, Application US/08455625  
Patent No. 5932218  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. D.  
APPLICANT: Shiral, Mutsunori  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolaach & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
ZIP: 22040-0747  
COUNTRY: USA  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,625  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 17:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "p18-9, see Table V"  
US-08-455-625-17  
Query Match 89.7%; Score 35; DB 2; Length 15;  
Best Local Similarity 87.5%; Pred. No. 0.51;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1 RAFTTICK 8  
DB 8 RAVFTICK 15  
RESULT 149  
US-08-455-625-23  
Sequence 23, Application US/08455625  
Patent No. 5932218  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. D.  
APPLICANT: Nara, Peter

APPLICANT: Shiral, Mutsunori  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolaach & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
ZIP: 22040-0747  
COUNTRY: USA  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,625  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 23:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "p18-15, see Table V"  
US-08-455-625-23  
Query Match 89.7%; Score 35; DB 2; Length 15;  
Best Local Similarity 87.5%; Pred. No. 0.51;  
Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
QY 1 RAFTTICK 8  
DB 8 RAVFTICK 15  
RESULT 150  
US-08-455-685-17  
Sequence 17, Application US/08455685  
Patent No. 6214347  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shiral, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 40  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA

COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,685  
FILING DATE: 31-MAY-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/060,988  
FILING DATE: 14-MAY-1993  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022003  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 17:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-455-685-17

Query Match 89.7%; Score 35; DB 3; Length 15;  
Best Local Similarity 87.5%; Pred. No. 0.51;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RAFTTICK 8  
Db 8 RYFTTICK 15

RESULT 151  
US-08-455-685-23  
Sequence 23, Application US/08455685  
Patent No. 6214347  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 40  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,685  
FILING DATE: 31-MAY-1995

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/060,988  
FILING DATE: 14-MAY-1993  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022003  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 23:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-455-685-23

Query Match 89.7%; Score 35; DB 3; Length 15;  
Best Local Similarity 87.5%; Pred. No. 0.51;  
Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTTICK 8  
Db 8 RYFTTICK 15

RESULT 152  
US-08-060-988A-17  
Sequence 17, Application US/08060988A  
Patent No. 6294322  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES  
TITLE OF INVENTION: THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 48  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/060,988A  
FILING DATE: 14-MAY-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.

REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 17:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-060-988A-17

Query Match 89.7%; Score 35; DB 3; Length 15;  
Best Local Similarity 87.5%; Pred. No. 0.51;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 RAFVTTICK 8  
| | | | |  
| | | | |  
Db 8 RVFVTTICK 15

RESULT 153  
US-08-060-988A-23  
Sequence 23, Application US/08060988A  
Patent No. 6294322  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES  
TITLE OF INVENTION: THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 48  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: Fastseq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/060,988A  
FILING DATE: 14-MAY-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 23:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear

MOLECULE TYPE: peptide  
US-08-060-988A-23

Query Match 89.7%; Score 35; DB 3; Length 15;  
Best Local Similarity 87.5%; Pred. No. 0.51;  
Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFVTTICK 8  
| | | | |  
| | | | |  
Db 8 RVFVTTICK 15

RESULT 154  
PCT-US94-05142-17  
Sequence 17, Application PC/TUS9405142  
GENERAL INFORMATION:  
APPLICANT:  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/05142  
CLASSIFICATION:  
FILING DATE: 13-MAY-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 17:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label=peptide  
OTHER INFORMATION: /note="p18-9, see Table v"  
PCT-US94-05142-17

Query Match 89.7%; Score 35; DB 5; Length 15;  
Best Local Similarity 87.5%; Pred. No. 0.51;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 RAFVTTICK 8  
| | | | |  
| | | | |  
Db 8 RVFVTTICK 15

RESULT 155  
PCT-US94-05142-23  
Sequence 23, Application PC/TUS9405142

GENERAL INFORMATION:  
APPLICANT: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/05142  
FILING DATE: 13-MAY-1994  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 23:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
PCT-US94-05142-23

Query Match 89.7%; Score 35; DB 5; Length 15;  
Best Local Similarity 87.5%; Pred. No. 0.51;  
Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYTGK 8  
DB 8 RAFTYTGK 15

RESULT 156  
US-08-279-906A-19  
Sequence 19, Application US/08279906A  
Patent No. 5618922  
GENERAL INFORMATION:  
APPLICANT: Ohno, Tsuneya  
APPLICANT: Terada, Masaki  
APPLICANT: Yoneda, Yukio  
TITLE OF INVENTION: NM03 Antibody Materials and Methods  
NUMBER OF SEQUENCES: 27  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &  
ADDRESS: Borun  
STREET: 6300 Sears Tower, 233 S. Wacker Drive  
CITY: Chicago  
STATE: Illinois  
COUNTRY: USA  
ZIP: 60606

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/279,906A  
FILING DATE:  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: No. 5618922and, Greta E.  
REGISTRATION NUMBER: 35,302  
REFERENCE/DOCKET NUMBER: 32028  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (312) 474-6300  
TELEFAX: (312) 474-0448  
TELEX: 25-3856  
INFORMATION FOR SEQ ID NO: 19:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 19 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-279-906A-19

Query Match 89.7%; Score 35; DB 1; Length 19;  
Best Local Similarity 87.5%; Pred. No. 0.65;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFTYTGK 8  
DB 6 RAFTYTGK 13

RESULT 157  
US-08-704-170-51  
Sequence 51, Application US/08704170  
Patent No. 5707626  
GENERAL INFORMATION:  
APPLICANT: Douvas, Angelina  
APPLICANT: Entesmann, Glenn  
APPLICANT: Takehana, Yoshi  
TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
TITLE OF INVENTION: IMMUNOINFECTION CLUSTER VIRUS INFECTIONS  
NUMBER OF SEQUENCES: 121  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Robbins, Berliner & Carson  
STREET: 201 No. 5707626th Figueroa Street, Suite 500  
CITY: Los Angeles  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 90012  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/704,170  
FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/029,850  
FILING DATE: 11-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Spitals, John P.  
REGISTRATION NUMBER: 29,215  
REFERENCE/DOCKET NUMBER: 1920-331  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 977-1001  
TELEFAX: (213) 977-1003  
INFORMATION FOR SEQ ID NO: 51:  
SEQUENCE CHARACTERISTICS:

LENGTH: 8 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-704-170-51

Query Match 87.2%; Score 34; DB 1; Length 8;  
Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTIG 7  
Db 2 RAFTTIG 8

RESULT 158  
PCT-US94-02631-51  
Sequence 51, Application PC/TUS9402631  
GENERAL INFORMATION:  
APPLICANT: Douvas, Angelina  
APPLICANT: Takehana, Yoshi  
TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
NUMBER OF SEQUENCES: 121  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Robbins, Berliner & Carson  
STREET: 201 North Figueroa Street, Suite 500  
CITY: Los Angeles  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 90012  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/02631  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/029,850  
FILING DATE: 11-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Spitalis, John P.  
REGISTRATION NUMBER: 29,215  
REFERENCE/DOCKET NUMBER: 1920-331  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 977-1001  
TELEFAX: (213) 977-1003  
INFORMATION FOR SEQ ID NO: 51:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 8 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
PCT-US94-02631-51

Query Match 87.2%; Score 34; DB 5; Length 8;  
Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTIG 7  
Db 2 RAFTTIG 8

RESULT 159  
PCT-US95-03236-25  
Sequence 25, Application PC/TUS9503236  
GENERAL INFORMATION:  
APPLICANT: University of Southern California

TITLE OF INVENTION: Methods to Diagnose and Treat HIV-1  
NUMBER OF SEQUENCES: 66  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Campbell and Flores  
STREET: 4370 La Jolla Village Drive, Suite 700  
CITY: San Diego  
STATE: California  
COUNTRY: USA  
ZIP: 92122  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/03236  
FILING DATE: 13-MAR-1995  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Imbra, Richard J.  
REGISTRATION NUMBER: 37,643  
REFERENCE/DOCKET NUMBER: FP-SI 1394  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (619) 535-9001  
TELEFAX: (619) 535-8949  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 8 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
PCT-US95-03236-25

Query Match 87.2%; Score 34; DB 5; Length 8;  
Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTIG 7  
Db 2 RAFTTIG 8

RESULT 160  
US-08-704-170-38  
Sequence 38, Application US/08704170  
Patent No. 5707626  
GENERAL INFORMATION:  
APPLICANT: Douvas, Angelina  
APPLICANT: Takehana, Yoshi  
TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
NUMBER OF SEQUENCES: 121  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Robbins, Berliner & Carson  
STREET: 201 No. 5707626th Figueroa Street, Suite 500  
CITY: Los Angeles  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 90012  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/704,170  
FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/029,850  
FILING DATE: 11-MAR-1993

ATTORNEY/AGENT INFORMATION:  
NAME: Spitals, John P.  
REGISTRATION NUMBER: 29,215  
REFERENCE/DOCKET NUMBER: 1920-331.  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 977-1001  
TELEFAX: (213) 977-1003  
INFORMATION FOR SEQ ID NO: 38:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 9 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-704-170-38

Query Match 87.2%; Score 34; DB 1; Length 9;  
Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 RAFTIG 7  
Db 3 RAFTIG 9

RESULT 161  
PCT-US94-02631-38  
Sequence 38, Application PC/TUS9402631  
GENERAL INFORMATION:  
APPLICANT: Douvas, Angelina  
APPLICANT: Takehana, Yoshi  
APPLICANT: Ehresmann, Glenn  
TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
TITLE OF INVENTION: IMMUNOINFECTION CLUSTER VIRUS INFECTIONS  
NUMBER OF SEQUENCES: 121  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Robbins, Berliner & Carson  
STREET: 201 North Figueroa Street, Suite 500  
CITY: Los Angeles  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 90012  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/02631  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US-08/029,850  
FILING DATE: 11-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Spitals, John P.  
REGISTRATION NUMBER: 29,215  
REFERENCE/DOCKET NUMBER: 1920-331  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 977-1001  
TELEFAX: (213) 977-1003  
INFORMATION FOR SEQ ID NO: 38:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 9 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
PCT-US94-02631-38

Query Match 87.2%; Score 34; DB 5; Length 9;  
Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 RAFTIG 7

Db 3 RAFTIG 9

RESULT 162  
US-08-704-170-71  
Sequence 71, Application US/08704170  
Patent No. 5707626  
GENERAL INFORMATION:  
APPLICANT: Douvas, Angelina  
APPLICANT: Takehana, Yoshi  
APPLICANT: Ehresmann, Glenn  
TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
TITLE OF INVENTION: IMMUNOINFECTION CLUSTER VIRUS INFECTIONS  
NUMBER OF SEQUENCES: 121  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Robbins, Berliner & Carson  
STREET: 201 No. 5707626th Figueroa Street, Suite 500  
CITY: Los Angeles  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 90012  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/704,170  
FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/029,850  
FILING DATE: 11-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Spitals, John P.  
REGISTRATION NUMBER: 29,215  
REFERENCE/DOCKET NUMBER: 1920-331  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 977-1001  
TELEFAX: (213) 977-1003  
INFORMATION FOR SEQ ID NO: 71:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 10 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-704-170-71

Query Match 87.2%; Score 34; DB 1; Length 10;  
Best Local Similarity 100.0%; Pred. No. 0.56;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 RAFTIG 7  
Db 4 RAFTIG 10

RESULT 163  
PCT-US94-02631-71  
Sequence 71, Application PC/TUS9402631  
GENERAL INFORMATION:  
APPLICANT: Douvas, Angelina  
APPLICANT: Takehana, Yoshi  
APPLICANT: Ehresmann, Glenn  
TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
TITLE OF INVENTION: IMMUNOINFECTION CLUSTER VIRUS INFECTIONS  
NUMBER OF SEQUENCES: 121  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Robbins, Berliner & Carson  
STREET: 201 North Figueroa Street, Suite 500  
CITY: Los Angeles  
STATE: California



COUNTRY: U.S.A.  
ZIP: 90012  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/02631  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/029,850  
FILING DATE: 11-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Spitalis, John P.  
REGISTRATION NUMBER: 29,215  
REFERENCE/DOCKET NUMBER: 1920-331  
TELEPHONE: (213) 977-1001  
TELEFAX: (213) 977-1003  
INFORMATION FOR SEQ ID NO: 71:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 10 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
PCT-US94-02631-71

Query Match 87.2%; Score 34; DB 5; Length 10;  
Best Local Similarity 100.0%; Pred. No. 0.56;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAVFTIG 7  
|||||  
DB 4 RAVFTIG 10

RESULT 164  
US-08-704-170-73  
Sequence 73, Application US/08704170  
Patent No. 5707626  
GENERAL INFORMATION:  
APPLICANT: Douvas, Angelina  
APPLICANT: Takehana, Yoshi  
APPLICANT: Ehresmann, Glenn  
TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
NUMBER OF SEQUENCES: 121  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Robbins, Berliner & Carson  
STREET: 201 No. 5707626th Figueroa Street, Suite 500  
CITY: Los Angeles  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 90012  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/704,170  
FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/029,850  
FILING DATE: 11-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Spitalis, John P.  
REGISTRATION NUMBER: 29,215  
REFERENCE/DOCKET NUMBER: 1920-331  
TELEPHONE: (213) 977-1001  
TELEFAX: (213) 977-1003  
INFORMATION FOR SEQ ID NO: 74:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 11 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-704-170-74

TELEPHONE: (213) 977-1001  
TELEFAX: (213) 977-1003  
INFORMATION FOR SEQ ID NO: 73:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 11 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-704-170-74

Query Match 87.2%; Score 34; DB 1; Length 11;  
Best Local Similarity 100.0%; Pred. No. 0.62;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAVFTIG 7  
|||||  
DB 5 RAVFTIG 11

RESULT 165  
US-08-704-170-74  
Sequence 74, Application US/08704170  
Patent No. 5707626  
GENERAL INFORMATION:  
APPLICANT: Douvas, Angelina  
APPLICANT: Takehana, Yoshi  
APPLICANT: Ehresmann, Glenn  
TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
NUMBER OF SEQUENCES: 121  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Robbins, Berliner & Carson  
STREET: 201 No. 5707626th Figueroa Street, Suite 500  
CITY: Los Angeles  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 90012  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/704,170  
FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/029,850  
FILING DATE: 11-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Spitalis, John P.  
REGISTRATION NUMBER: 29,215  
REFERENCE/DOCKET NUMBER: 1920-331  
TELEPHONE: (213) 977-1001  
TELEFAX: (213) 977-1003  
INFORMATION FOR SEQ ID NO: 74:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 11 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-704-170-74

Query Match 87.2%; Score 34; DB 1; Length 11;  
Best Local Similarity 100.0%; Pred. No. 0.62;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAVFTIG 7  
|||||  
DB 5 RAVFTIG 11

RESULT 166  
PCT-US94-02631-73  
Sequence 73, Application PC/TUS9402631  
GENERAL INFORMATION:  
APPLICANT: Douvas, Angelina  
APPLICANT: Takehana, Yoshi  
APPLICANT: Ehresmann, Glenn  
TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
TITLE OF INVENTION: IMMUNOINFECTION CLUSTER VIRUS INFECTIONS  
NUMBER OF SEQUENCES: 121  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Robbins, Berliner & Carson  
STREET: 201 North Figueroa Street, Suite 500  
CITY: Los Angeles  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 90012  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/02631  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/029,850  
FILING DATE: 11-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Spitalis, John P.  
REGISTRATION NUMBER: 29,215  
REFERENCE/DOCKET NUMBER: 1920-331  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 977-1001  
TELEFAX: (213) 977-1003  
INFORMATION FOR SEQ ID NO: 73:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 11 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
PCT-US94-02631-73

Query Match 87.2%; Score 34; DB 5; Length 11;  
Best Local Similarity 100.0%; Pred. No. 0.62;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYIG 7  
Db 5 RAFTYIG 11

RESULT 167  
PCT-US94-02631-74  
Sequence 74, Application PC/TUS9402631  
GENERAL INFORMATION:  
APPLICANT: Douvas, Angelina  
APPLICANT: Takehana, Yoshi  
APPLICANT: Ehresmann, Glenn  
TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
TITLE OF INVENTION: IMMUNOINFECTION CLUSTER VIRUS INFECTIONS  
NUMBER OF SEQUENCES: 121  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Robbins, Berliner & Carson  
STREET: 201 North Figueroa Street, Suite 500  
CITY: Los Angeles  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 90012  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/02631  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/029,850  
FILING DATE: 11-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Spitalis, John P.  
REGISTRATION NUMBER: 29,215  
REFERENCE/DOCKET NUMBER: 1920-331  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 977-1001  
TELEFAX: (213) 977-1003  
INFORMATION FOR SEQ ID NO: 74:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 11 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
PCT-US94-02631-74

Query Match 87.2%; Score 34; DB 5; Length 11;  
Best Local Similarity 100.0%; Pred. No. 0.62;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTYIG 7  
Db 5 RAFTYIG 11

RESULT 168  
PCT-US95-03236-29  
Sequence 29, Application PC/TUS9503236  
GENERAL INFORMATION:  
APPLICANT: University of Southern California  
TITLE OF INVENTION: Methods to Diagnose and Treat HIV-1  
TITLE OF INVENTION: Infection  
NUMBER OF SEQUENCES: 66  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Campbell and Flores  
STREET: 4370 La Jolla Village Drive, Suite 700  
CITY: San Diego  
STATE: California  
COUNTRY: USA  
ZIP: 92122  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/03236  
FILING DATE: 13-MAR-1995  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Imbra, Richard J.  
REGISTRATION NUMBER: 37,643  
REFERENCE/DOCKET NUMBER: FP-SI 1394  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (619) 535-9001  
TELEFAX: (619) 535-8949  
INFORMATION FOR SEQ ID NO: 29:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
PCT-US95-03236-29

Query Match 87.2%; Score 34; DB 5; Length 14;

Best Local Similarity 100.0%; Pred. No. 0.78;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAVFTIG 7  
|||  
Db 8 RAVFTIG 14

## RESULT 169

PCT-US95-03236-52  
Sequence 52, Application PC/TUS9503236  
GENERAL INFORMATION:  
APPLICANT: University of Southern California  
TITLE OF INVENTION: Methods to Diagnose and Treat HIV-1  
TITLE OF INVENTION: Infection  
NUMBER OF SEQUENCES: 66  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Campbell and Flores  
STREET: 4370 La Jolla Village Drive, Suite 700  
CITY: San Diego  
STATE: California  
COUNTRY: USA  
ZIP: 92122  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/03236  
FILING DATE: 13-MAR-1995  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Imbra, Richard J.  
REGISTRATION NUMBER: 37,643  
REFERENCE/DOCKET NUMBER: FP-SI 1394  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (619) 535-9901  
TELEFAX: (619) 535-8949  
INFORMATION FOR SEQ ID NO: 52:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
PCT-US95-03236-52

Query Match 87.2%; Score 34; DB 5; Length 14;  
Best Local Similarity 100.0%; Pred. No. 0.78;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAVFTIG 7  
|||  
Db 8 RAVFTIG 14

## RESULT 170

US-08-704-170-72  
Sequence 72, Application US/08704170  
Patent No. 5707626  
GENERAL INFORMATION:  
APPLICANT: Douvas, Angelina  
APPLICANT: Takehana, Yoshi  
APPLICANT: Ehresmann, Glenn  
TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR  
TITLE OF INVENTION: IMMUNOINJECTIVE CLUSTER VIRUS INFECTIONS  
NUMBER OF SEQUENCES: 121  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Robbins, Berline & Carson  
STREET: 201 No. 5707626th Figueroa Street, Suite 500  
CITY: Los Angeles  
STATE: California  
COUNTRY: U.S.A.

ZIP: 90012  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/704,170  
FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/029,850  
FILING DATE: 11-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Spitalis, John P.  
REGISTRATION NUMBER: 29,215  
REFERENCE/DOCKET NUMBER: 1920-331  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 977-1001  
TELEFAX: (213) 977-1003  
INFORMATION FOR SEQ ID NO: 72:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-704-170-72

Query Match 87.2%; Score 34; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.84;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAVFTIG 7  
|||  
Db 9 RAVFTIG 15

## RESULT 171

US-08-455-625-16  
Sequence 16, Application US/08455625  
Patent No. 5932218  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. D.  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsumori  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolaich & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,625  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330

REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 16:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "p18-8, see Table V"  
US-08-455-625-16

Query Match 87.2%; Score 34; DB 2; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.84;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 2 AFVTIGK 8  
|||  
9 AFVTIGK 15

Db

RESULT 172  
US-08-455-625-19  
Sequence 19, Application US/08455625  
Patent No. 5932218  
GENERAL INFORMATION:  
APPLICANT: Beziofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. D.  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsumori  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P. O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,625  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 19:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide

FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "p18-11, see Table V"  
US-08-455-625-19

Query Match 87.2%; Score 34; DB 2; Length 15;  
Best Local Similarity 87.5%; Pred. No. 0.84;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Cy 1 RAFTYIGK 8  
|||  
8 RAFTYIGK 15

Db

RESULT 173  
US-08-455-625-20  
Sequence 20, Application US/08455625  
Patent No. 5932218  
GENERAL INFORMATION:  
APPLICANT: Beziofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. D.  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsumori  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P. O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,625  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 20:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "p18-12, see Table V"  
US-08-455-625-20

Query Match 87.2%; Score 34; DB 2; Length 15;  
Best Local Similarity 87.5%; Pred. No. 0.84;

Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8  
db 8 RAFTVIGK 15

RESULT 174  
US-08-455-625-21  
; Sequence 21, Application US/08455625  
; Patent No. 5932218  
; GENERAL INFORMATION:  
; APPLICANT: Berzofsky, Jay A.  
; APPLICANT: Ahlers, Jeffrey D.  
; APPLICANT: Pendleton, C. D.  
; APPLICANT: Nara, Peter  
; APPLICANT: Shirai, Mutsunori  
; TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
; TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
; TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Birch, Stewart, Kolasch & Birch  
; STREET: P.O. Box 747  
; CITY: Falls Church  
; STATE: Virginia  
; COUNTRY: USA  
; ZIP: 22040-0747  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent Release #1.0, Version #1.25  
; CURRENT APPLICATION NUMBER: US/08/455,625  
; APPLICATION NUMBER: US/08/455,625  
; FILING DATE:  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/060,988  
; FILING DATE: 14-MAY-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Svensson, Leonard R.  
; REGISTRATION/DOCKET NUMBER: 30330  
; REFERENCE/DOCKET NUMBER: 1173-434P  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-205-8000  
; TELEFAX: 703-205-8050  
; INFORMATION FOR SEQ ID NO: 21:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; FRAGMENT TYPE: internal  
; FEATURE:  
; NAME/KEY: Peptide  
; LOCATION: 1..15  
; OTHER INFORMATION: /label=peptide  
; OTHER INFORMATION: /note="p18-13, see Table V"  
US-08-455-625-21

Query Match 87.2%; Score 34; DB 2; Length 15;  
Best Local Similarity 87.5%; Pred. No. 0.84;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8  
db 8 RAFTVIGK 15

RESULT 175  
US-08-455-685-16  
; Sequence 16, Application US/08455685

Patent No. 6214347  
; GENERAL INFORMATION:  
; APPLICANT: Berzofsky, Jay A.  
; APPLICANT: Ahlers, Jeffrey D.  
; APPLICANT: Pendleton, C. David  
; APPLICANT: Nara, Peter  
; APPLICANT: Shirai, Mutsunori  
; TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT  
; TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
; TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
; NUMBER OF SEQUENCES: 40  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Fish & Richardson P.C.  
; STREET: 225 Franklin Street  
; CITY: Boston  
; STATE: MA  
; COUNTRY: US  
; ZIP: 02110-2804  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM compatible  
; OPERATING SYSTEM: Windows95  
; SOFTWARE: FastSeq for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/455,685  
; FILING DATE: 31-MAY-1995  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/060,988  
; FILING DATE: 14-MAY-1993  
; APPLICATION NUMBER: 07/847,311  
; FILING DATE: 06-MAR-1992  
; APPLICATION NUMBER: 07/751,998  
; FILING DATE: 29-AUG-1991  
; APPLICATION NUMBER: 07/148,692  
; FILING DATE: 26-JAN-1988  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Beattie, Ingrid A.  
; REGISTRATION/DOCKET NUMBER: P-42,306  
; REFERENCE/DOCKET NUMBER: 08830/022003  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617/542-5070  
; TELEFAX: 617/542-8906  
; TELEX: 200154  
; INFORMATION FOR SEQ ID NO: 16:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-08-455-685-16

Query Match 87.2%; Score 34; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.84;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 AFTVIGK 8  
db 9 AFTVIGK 15

RESULT 176  
US-08-455-685-19  
; Sequence 19, Application US/08455685  
; Patent No. 6214347  
; GENERAL INFORMATION:  
; APPLICANT: Berzofsky, Jay A.  
; APPLICANT: Ahlers, Jeffrey D.  
; APPLICANT: Pendleton, C. David  
; APPLICANT: Nara, Peter  
; APPLICANT: Shirai, Mutsunori  
; TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT  
; TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
; TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1

NUMBER OF SEQUENCES: 40  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,685  
FILING DATE: 31-MAY-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/060,988  
FILING DATE: 14-MAY-1993  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022003  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 19:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-455-685-19

Query Match 87.2%; Score 34; DB 3; Length 15;  
Best Local Similarity 87.5%; Pred. No. 0.84;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
DB 8 RAFTYICK 15

RESULT 177  
US-08-455-685-20  
Sequence 20, Application US/08455685  
Patent No. 6214347  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 40  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,685  
FILING DATE: 31-MAY-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/060,988  
FILING DATE: 14-MAY-1993  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022003  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 20:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-455-685-20

Query Match 87.2%; Score 34; DB 3; Length 15;  
Best Local Similarity 87.5%; Pred. No. 0.84;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFTYICK 8  
DB 8 RAFTYICK 15

RESULT 178  
US-08-455-685-21  
Sequence 21, Application US/08455685  
Patent No. 6214347  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 40  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,685  
FILING DATE: 31-MAY-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/060,988  
FILING DATE: 14-MAY-1993  
APPLICATION NUMBER: 07/847,311

FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022003  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 21:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-060-988A-16

Query Match 87.2%; Score 34; DB 3; Length 15;  
Best Local Similarity 87.5%; Pred. No. 0.84;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 APTTICK 8  
DB 8 APTTICK 15

RESULT 179  
US-08-060-988A-16  
Sequence 16, Application US/08060988A  
Patent No. 6294322  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES  
TITLE OF INVENTION: THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 48  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FASTSEQ for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/060,988A  
FILING DATE: 14-MAY-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070

TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 16:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-060-988A-16

Query Match 87.2%; Score 34; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.84;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 APTTICK 8  
DB 9 APTTICK 15

RESULT 180  
US-08-060-988A-19  
Sequence 19, Application US/08060988A  
Patent No. 6294322  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES  
TITLE OF INVENTION: THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 48  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FASTSEQ for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/060,988A  
FILING DATE: 14-MAY-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 19:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-060-988A-19

Query Match 87.2%; Score 34; DB 3; Length 15;

Best Local Similarity 87.5%; Pred. No. 0.84;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8  
|||  
Db 8 RAFTVIGK 15

RESULT 181

US-08-060-988A-20  
; Sequence 20, Application US/08060988A  
; Patent No. 6294322

GENERAL INFORMATION:

APPLICANT: Berzofsky, Jay A.

APPLICANT: Ahlers, Jeffrey D.

APPLICANT: Pendleton, C. David

APPLICANT: Nara, Peter

APPLICANT: Shirai, Mutsunori

TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES

TITLE OF INVENTION: THAT ELICIT

TITLE OF INVENTION: HELPER T-LYMPHOCYTE AND

TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1

NUMBER OF SEQUENCES: 48

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson P.C.

STREET: 225 Franklin Street

CITY: Boston

STATE: MA

COUNTRY: US

ZIP: 02110-2804

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: Windows95

SOFTWARE: FASTSEQ for Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/060,988A

FILING DATE: 14-MAY-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/847,311

FILING DATE: 06-MAR-1992

APPLICATION NUMBER: 07/751,998

FILING DATE: 29-AUG-1991

APPLICATION NUMBER: 07/148,692

FILING DATE: 26-JAN-1988

ATTORNEY/AGENT INFORMATION:

NAME: Beattie, Ingrid A.

REGISTRATION NUMBER: P-42,306

REFERENCE/DOCKET NUMBER: 08830/022001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 617/542-5070

TELEFAX: 617/542-8906

TELEX: 200154

INFORMATION FOR SEQ ID NO: 20:

SEQUENCE CHARACTERISTICS:

LENGTH: 15 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-060-988A-20

Query Match 87.2%; Score 34; DB 3; Length 15;  
Best Local Similarity 87.5%; Pred. No. 0.84;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8  
|||  
Db 8 RAFTVIGK 15

RESULT 182

US-08-060-988A-21  
; Sequence 21, Application US/08060988A

Patent No. 6294322

GENERAL INFORMATION:

APPLICANT: Berzofsky, Jay A.

APPLICANT: Ahlers, Jeffrey D.

APPLICANT: Pendleton, C. David

APPLICANT: Nara, Peter

APPLICANT: Shirai, Mutsunori

TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES

TITLE OF INVENTION: THAT ELICIT

TITLE OF INVENTION: HELPER T-LYMPHOCYTE AND

TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1

NUMBER OF SEQUENCES: 48

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson P.C.

STREET: 225 Franklin Street

CITY: Boston

STATE: MA

COUNTRY: US

ZIP: 02110-2804

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: Windows95

SOFTWARE: FASTSEQ for Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/060,988A

FILING DATE: 14-MAY-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/847,311

FILING DATE: 06-MAR-1992

APPLICATION NUMBER: 07/751,998

FILING DATE: 29-AUG-1991

APPLICATION NUMBER: 07/148,692

FILING DATE: 26-JAN-1988

ATTORNEY/AGENT INFORMATION:

NAME: Beattie, Ingrid A.

REGISTRATION NUMBER: P-42,306

REFERENCE/DOCKET NUMBER: 08830/022001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 617/542-5070

TELEFAX: 617/542-8906

TELEX: 200154

INFORMATION FOR SEQ ID NO: 21:

SEQUENCE CHARACTERISTICS:

LENGTH: 15 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-060-988A-21

Query Match 87.2%; Score 34; DB 3; Length 15;  
Best Local Similarity 87.5%; Pred. No. 0.84;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8  
|||  
Db 8 RAFTVIGK 15

RESULT 183

PCT-US94-02631-72

; Sequence 72, Application PC/TUS9402631

GENERAL INFORMATION:

APPLICANT: Douvas, Angelina

APPLICANT: Takehana, Yoichi

APPLICANT: Ehresmann, Glenn

TITLE OF INVENTION: THERAPEUTIC STRATEGIES FOR

TITLE OF INVENTION: IMMUNOINFECTION CLUSTER VIRUS INFECTIONS

NUMBER OF SEQUENCES: 121

CORRESPONDENCE ADDRESS:

ADDRESSEE: Robbins, Berliner & Carson

STREET: 201 North Figueroa Street, Suite 500

CITY: Los Angeles



STATE: California  
COUNTRY: U.S.A.  
ZIP: 90012  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/02631  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/029,850  
FILING DATE: 11-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Spitala, John P.  
REGISTRATION NUMBER: 29,215  
REFERENCE/DOCKET NUMBER: 1920-331  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 977-1001  
TELEFAX: (213) 977-1003  
INFORMATION FOR SEQ ID NO: 72:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
PCT-US94-02631-72

Query Match 87.2%; Score 34; DB 5; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.84;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AFVTIG 7  
Db 9 AFVTIG 15

RESULT 184  
PCT-US94-05142-16  
Sequence 16, Application PC/TUS9405142  
GENERAL INFORMATION:  
APPLICANT:  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/05142  
FILING DATE: 13-MAY-1994  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svenson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000

TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 16:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label=peptide  
PCT-US94-05142-16

Query Match 87.2%; Score 34; DB 5; Length 15;  
Best Local Similarity 100.0%; Pred. No. 0.84;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 AFVTIG 8  
Db 9 AFVTIG 15

RESULT 185  
PCT-US94-05142-19  
Sequence 19, Application PC/TUS9405142  
GENERAL INFORMATION:  
APPLICANT:  
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT  
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T  
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Birch, Stewart, Kolasch & Birch  
STREET: P.O. Box 747  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/05142  
FILING DATE: 13-MAY-1994  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svenson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
FILING DATE: 13-MAY-1994  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label=peptide  
PCT-US94-05142-19

Query Match 87.2%; Score 34; DB 5; Length 15;  
Best Local Similarity 87.5%; Pred. No. 0.84;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFTTIGK 8  
DB 8 RAFTTIGK 15

## RESULT 186

PCT-US94-05142-20

Sequence 20, Application PC/TUS9405142

GENERAL INFORMATION:

APPLICANT:

TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT

TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T

NUMBER OF SEQUENCES: 36

CORRESPONDENCE ADDRESS:

ADDRESS: Birch, Stewart, Kolaach &amp; Birch

STREET: P.O. Box 747

CITY: Falls Church

STATE: Virginia

COUNTRY: USA

ZIP: 22040-0747

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: IBM PC compatible

SOFTWARE: Patent in Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US94/05142

FILING DATE: 13-MAY-1994

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/060,988

FILING DATE: 14-MAY-1993

ATTORNEY/AGENT INFORMATION:

NAME: Svensson, Leonard R.

REGISTRATION NUMBER: 30330

REFERENCE/DOCKET NUMBER: 1173-434P

TELEPHONE: 703-205-8050

TELEFAX: 703-205-8000

INFORMATION FOR SEQ ID NO: 20:

SEQUENCE CHARACTERISTICS:

LENGTH: 15 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

FRAGMENT TYPE: internal

FEATURE:

NAME/KEY: Peptide

LOCATION: 1..15

OTHER INFORMATION: /label= peptide

OTHER INFORMATION: /note= "p18-12, see Table V"

PCT-US94-05142-20

Query Match 87.2%; Score 34; DB 5; Length 15;

Best Local Similarity 87.5%; Pred. No. 0.84;

Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFTTIGK 8

DB 8 RAFTTIGK 15

RESULT 187

PCT-US94-05142-21

Sequence 21, Application PC/TUS9405142

GENERAL INFORMATION:

APPLICANT:

TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT

Query Match 87.2%; Score 34; DB 5; Length 15;

Best Local Similarity 87.5%; Pred. No. 0.84;

Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFTTIGK 8

DB 8 RAFTTIGK 15

RESULT 188

PCT-US94-05142-22

Sequence 22, Application PC/TUS9405142

GENERAL INFORMATION:

APPLICANT:

TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT

TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T

TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV

NUMBER OF SEQUENCES: 36

CORRESPONDENCE ADDRESS:

ADDRESS: Birch, Stewart, Kolaach & Birch

STREET: P.O. Box 747

CITY: Falls Church

STATE: Virginia

COUNTRY: USA

ZIP: 22040-0747

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent in Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US94/05142

FILING DATE: 13-MAY-1994

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/060,988

FILING DATE: 14-MAY-1993

ATTORNEY/AGENT INFORMATION:

NAME: Svensson, Leonard R.

REGISTRATION NUMBER: 30330

REFERENCE/DOCKET NUMBER: 1173-434P

TELEPHONE: 703-205-8050

TELEFAX: 703-205-8000

INFORMATION FOR SEQ ID NO: 21:

SEQUENCE CHARACTERISTICS:

LENGTH: 15 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

FRAGMENT TYPE: internal

FEATURE:

NAME/KEY: Peptide

LOCATION: 1..15

OTHER INFORMATION: /label= peptide

OTHER INFORMATION: /note= "p18-13, see Table V"

PCT-US94-05142-21

Query Match 87.2%; Score 34; DB 5; Length 15;

Best Local Similarity 87.5%; Pred. No. 0.84;

Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFTTIGK 8

DB 8 RAFTTIGK 15

RESULT 189

US-08-257-528B-35

Sequence 35, Application US/08257528B

Patent No. 5639854

GENERAL INFORMATION:

APPLICANT: Sia, Charles D.Y.

APPLICANT: CHONG, Pele

APPLICANT: KLEIN, Michel H.

TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides

NUMBER OF SEQUENCES: 101

CORRESPONDENCE ADDRESS:

ADDRESSEE: Sim &amp; McBurney

STREET: Suite 701, 330 University Avenue

CITY: Toronto

STATE: Ontario

COUNTRY: Canada

ZIP: M5G 1R7

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/257,528B  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-336 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 35:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 17 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-257-528B-35

Query Match 87.2%; Score 34; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 0.95;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTIG 7  
Db 11 RAFTTIG 17

## RESULT 189

US-08-460-602A-35  
Sequence 35, Application US/08460602A  
Patent No. 5759769  
GENERAL INFORMATION:  
APPLICANT: SIA, Charles D.Y.  
APPLICANT: CHONG, Pele  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & Mcburney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/460,602A  
FILING DATE: 02-JUN-1995  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-450 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1163  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 35:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 17 amino acids

TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-460-602A-35

Query Match 87.2%; Score 34; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 0.95;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTIG 7  
Db 11 RAFTTIG 17

## RESULT 190

US-08-463-966A-35  
Sequence 35, Application US/08463966A  
Patent No. 5795955  
GENERAL INFORMATION:  
APPLICANT: SIA, Charles D.Y.  
APPLICANT: CHONG, Pele  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & Mcburney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/463,966A  
FILING DATE: 05-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/257,528  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/073,378  
FILING DATE: 09-JUN-1993  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-487 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1163  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 35:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 17 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-463-966A-35

Query Match 87.2%; Score 34; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 0.95;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFTTIG 7  
Db 11 RAFTTIG 17

## RESULT 191

US-08-465-217A-35  
; Sequence 35, Application US/08465217A  
; Patent No. 5800822  
; GENERAL INFORMATION:  
; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; APPLICANT: KLEIN, Michel H.  
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
; NUMBER OF SEQUENCES: 101  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: Suite 701, 330 University Avenue  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: MSG 1R7  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/465,217A  
; FILING DATE: 05-JUN-1995  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/257,528  
; FILING DATE: 09-JUN-1994  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/073,378  
; FILING DATE: 09-JUN-1993  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: STEWART, MICHAEL I.  
; REGISTRATION NUMBER: 24,973  
; REFERENCE/DOCKET NUMBER: 1038-486 MIS:jb  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 595-1155  
; TELEFAX: (416) 595-1163  
; INFORMATION FOR SEQ ID NO: 35:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 17 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; US-08-465-217A-35  
Query Match 87.2%; Score 34; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 0.95;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 1 RAFVTIG 7  
Db 11 RAFVTIG 17  
RESULT 192  
US-08-464-329A-35  
; Sequence 35, Application US/08464329A  
; Patent No. 5817754  
; GENERAL INFORMATION:  
; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; APPLICANT: KLEIN, Michel H.  
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
; NUMBER OF SEQUENCES: 101  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: Suite 701, 330 University Avenue  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada

ZIP: MSG 1R7  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/464,329A  
; FILING DATE: 05-JUN-1995  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/257,528  
; FILING DATE: 09-JUN-1994  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/073,378  
; FILING DATE: 09-JUN-1993  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: STEWART, MICHAEL I.  
; REGISTRATION NUMBER: 24,973  
; REFERENCE/DOCKET NUMBER: 1038-449 MIS:jb  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 595-1155  
; TELEFAX: (416) 595-1163  
; INFORMATION FOR SEQ ID NO: 35:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 17 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; US-08-464-329A-35  
Query Match 87.2%; Score 34; DB 2; Length 17;  
Best Local Similarity 100.0%; Pred. No. 0.95;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 1 RAFVTIG 7  
Db 11 RAFVTIG 17  
RESULT 193  
US-08-462-507A-35  
; Sequence 35, Application US/08462507A  
; Patent No. 5876731  
; GENERAL INFORMATION:  
; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; APPLICANT: KLEIN, Michel H.  
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
; NUMBER OF SEQUENCES: 101  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: Suite 701, 330 University Avenue  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: MSG 1R7  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/462,507A  
; FILING DATE: 05-JUN-1995  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/257,528  
; FILING DATE: 09-JUN-1994  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/073,378  
FILING DATE: 09-JUN-1993  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-451 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 35:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 17 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-462-507A-35

Query Match 87.2%; Score 34; DB 2; Length 17;  
Best Local Similarity 100.0%; Pred. No. 0.95;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTTG 7  
|||||  
Db 11 RAFVTTG 17

RESULT 194  
US-08-467-881A-35  
Sequence 35, Application US/08467881A  
Patent No. 5951986  
GENERAL INFORMATION:  
APPLICANT: SIA, Charles D.Y.  
APPLICANT: CHONG, Pele  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5G 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/467,881A  
FILING DATE: 06-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/257,528  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/073,378  
FILING DATE: 09-JUN-1993  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-488 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 35:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 17 amino acids  
TYPE: amino acid  
STRANDEDNESS: single

TOPOLOGY: linear  
US-08-467-881A-35

Query Match 87.2%; Score 34; DB 2; Length 17;  
Best Local Similarity 100.0%; Pred. No. 0.95;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTTG 7  
|||||  
Db 11 RAFVTTG 17

RESULT 195  
PCT-US92-06688-13  
Sequence 13, Application PC/TUS9206688  
GENERAL INFORMATION:  
APPLICANT: REPLIGEN CORPORATION  
APPLICANT: THE ROCKEFELLER UNIVERSITY  
TITLE OF INVENTION: MULTIPLE ANTIGEN PEPTIDES FOR USE AS HIV  
TITLE OF INVENTION: VACCINES  
NUMBER OF SEQUENCES: 21  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: Massachusetts  
COUNTRY: U.S.A.  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
COMPUTER: IBM PS/2 Model 50Z or 55SX  
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)  
SOFTWARE: WordPerfect (Version 5.1)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US92/06688  
FILING DATE: 19920811  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 744,281  
FILING DATE: 13 August 1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Paul T. Clark  
REGISTRATION NUMBER: 30,162  
REFERENCE/DOCKET NUMBER: 00231/052WO1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (617) 542-5070  
TELEFAX: (617) 542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 17  
TYPE: AMINO ACID  
TOPOLOGY: linear  
PCT-US92-06688-13

Query Match 87.2%; Score 34; DB 5; Length 17;  
Best Local Similarity 100.0%; Pred. No. 0.95;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFVTTG 7  
|||||  
Db 11 RAFVTTG 17

RESULT 196  
US-08-455-625-18  
Sequence 18, Application US/08455625  
Patent No. 5932218  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. D.  
APPLICANT: Nara, Peter

```
APPLICANT: Shitai, Mutsunori
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSEE: Birch, Stewart, Kolasch & Birch
STREET: P.O. Box 747
CITY: Falls Church
STATE: Virginia
COUNTRY: USA
ZIP: 22040-0747
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/455,625
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/060,988
FILING DATE: 14-MAY-1993
ATTORNEY/AGENT INFORMATION:
NAME: Svensson, Leonard R.
REGISTRATION NUMBER: 30330
REFERENCE/DOCKET NUMBER: 1173-434P
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-205-8000
TELEFAX: 703-205-8050
INFORMATION FOR SEQ ID NO: 18:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
FRAGMENT TYPE: internal
FEATURE:
NAME/KEY: Peptide
LOCATION: 1..15
OTHER INFORMATION: /label=peptide
OTHER INFORMATION: /note="p18-10, see Table V"
US-08-455-625-18

Query Match 84.6%; Score 33; DB 2; Length 15;
Best Local Similarity 87.5%; Pred. No. 1.4;
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8
DB 8 RAFTVIGK 15

RESULT 197
US-08-455-625-22
Sequence 22, Application US/08455625
Patent No. 5932218
GENERAL INFORMATION:
APPLICANT: Berzofsky, Jay A.
APPLICANT: Ahlers, Jeffrey D.
APPLICANT: Pendleton, C. D.
APPLICANT: Nara, Peter
APPLICANT: Shitai, Mutsunori
TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT
TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T
TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSEE: Birch, Stewart, Kolasch & Birch
STREET: P.O. Box 747
CITY: Falls Church
STATE: Virginia
```

```
COUNTRY: USA
ZIP: 22040-0747
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/455,625
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/060,988
FILING DATE: 14-MAY-1993
ATTORNEY/AGENT INFORMATION:
NAME: Svensson, Leonard R.
REGISTRATION NUMBER: 30330
REFERENCE/DOCKET NUMBER: 1173-434P
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-205-8000
TELEFAX: 703-205-8050
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
FRAGMENT TYPE: internal
FEATURE:
NAME/KEY: Peptide
LOCATION: 1..15
OTHER INFORMATION: /label=peptide
OTHER INFORMATION: /note="p18-14, see Table V"
US-08-455-625-22

Query Match 84.6%; Score 33; DB 2; Length 15;
Best Local Similarity 87.5%; Pred. No. 1.4;
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8
DB 8 RAFTVIGK 15

RESULT 198
US-08-455-685-18
Sequence 18, Application US/08455685
Patent No. 6214347
GENERAL INFORMATION:
APPLICANT: Berzofsky, Jay A.
APPLICANT: Ahlers, Jeffrey D.
APPLICANT: Pendleton, C. David
APPLICANT: Nara, Peter
APPLICANT: Shitai, Mutsunori
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT
TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1
NUMBER OF SEQUENCES: 40
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/455,685
FILING DATE: 31-MAY-1995
```

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/060,988  
FILING DATE: 14-MAY-1993  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022003  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 18:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-455-685-18

Query Match 84.6%; Score 33; DB 3; Length 15;  
Best Local Similarity 87.5%; Pred. No. 1.4;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RAFTYICK 8  
Db 8 RAFTYICK 15

RESULT 199  
US-08-455-685-22  
Sequence 22, Application US/08455685  
Patent No. 6214347  
GENERAL INFORMATION:  
APPLICANT: Bezofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 40  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,685  
FILING DATE: 31-MAY-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/060,988  
FILING DATE: 14-MAY-1993  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:

NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022003  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 22:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-455-685-22

Query Match 84.6%; Score 33; DB 3; Length 15;  
Best Local Similarity 87.5%; Pred. No. 1.4;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 RAFTYICK 8  
Db 8 RAFTYICK 15

RESULT 200  
US-08-060-988A-18  
Sequence 18, Application US/08060988A  
Patent No. 6294322  
GENERAL INFORMATION:  
APPLICANT: Bezofsky, Jay A.  
APPLICANT: Ahlers, Jeffrey D.  
APPLICANT: Pendleton, C. David  
APPLICANT: Nara, Peter  
APPLICANT: Shirai, Mutsunori  
TITLE OF INVENTION: MULTIDETERMINANT PEPTIDES  
TITLE OF INVENTION: THAT ELICIT  
TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND  
TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1  
NUMBER OF SEQUENCES: 48  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: US  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows95  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/060,988A  
FILING DATE: 14-MAY-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/847,311  
FILING DATE: 06-MAR-1992  
APPLICATION NUMBER: 07/751,998  
FILING DATE: 29-AUG-1991  
APPLICATION NUMBER: 07/148,692  
FILING DATE: 26-JAN-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Beattie, Ingrid A.  
REGISTRATION NUMBER: P-42,306  
REFERENCE/DOCKET NUMBER: 08830/022001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 18:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid

TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-060-988A-18

Query Match 84.6%; Score 33; DB 3; Length 15;  
Best Local Similarity 87.5%; Pred. No. 1.4;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFTVIGK 8  
|||  
8 RAFTVIGK 15

RESULT 201  
US-08-060-988A-22  
Sequence 22, Application US/08060988A  
Patent No. 629432

GENERAL INFORMATION:

APPLICANT: Berzofsky, Jay A.

APPLICANT: Ahlers, Jeffrey D.

APPLICANT: Pendleton, C. David

APPLICANT: Nara, Peter

APPLICANT: Shirai, Mutsunori

TITLE OF INVENTION: MULTITERMINANT PEPTIDES

TITLE OF INVENTION: THAT ELICIT

TITLE OF INVENTION: HELPER T-LYMPHOCYTE, CYTOTOXIC T LYMPHOCYTE AND

TITLE OF INVENTION: NEUTRALIZING ANTIBODY RESPONSES AGAINST HIV-1

NUMBER OF SEQUENCES: 48

CORRESPONDENCE ADDRESS:

ADDRESS: Fish & Richardson P.C.

STREET: 225 Franklin Street

CITY: Boston

STATE: MA

COUNTRY: US

ZIP: 02110-2804

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: Windows95

SOFTWARE: FastSeq for Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/060, 988A

FILING DATE: 14-MAY-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/847,311

FILING DATE: 06-MAR-1992

APPLICATION NUMBER: 07/751,998

FILING DATE: 29-AUG-1991

APPLICATION NUMBER: 07/148,692

FILING DATE: 26-JAN-1988

ATTORNEY/AGENT INFORMATION:

NAME: Beattie, Ingrid A.

REGISTRATION NUMBER: P-42,306

REFERENCE/DOCKET NUMBER: 08830/022001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 617/542-5070

TELEFAX: 617/542-8906

TELEX: 200154

INFORMATION FOR SEQ ID NO: 22:

SEQUENCE CHARACTERISTICS:

LENGTH: 15 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-060-988A-22

QY 1 RAFTVIGK 8  
|||  
8 RAFTVIGK 15

Db 8 RAFTVIGK 15

RESULT 202  
PCT-US94-05142-18  
Sequence 18, Application PC/TUS9405142

GENERAL INFORMATION:

APPLICANT:

TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT

TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T

TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV

NUMBER OF SEQUENCES: 36

CORRESPONDENCE ADDRESS:

ADDRESS: Birch, Stewart, Kolasch & Birch

STREET: P.O. Box 747

CITY: Falls Church

STATE: Virginia

COUNTRY: USA

ZIP: 22040-0747

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US94/05142

FILING DATE: 13-MAY-1994

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/060, 988

FILING DATE: 14-MAY-1993

ATTORNEY/AGENT INFORMATION:

NAME: Svensson, Leonard R.

REGISTRATION NUMBER: 30330

REFERENCE/DOCKET NUMBER: 1173-434P

TELECOMMUNICATION INFORMATION:

TELEPHONE: 703-205-8000

TELEFAX: 703-205-8050

INFORMATION FOR SEQ ID NO: 18:

SEQUENCE CHARACTERISTICS:

LENGTH: 15 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

FRAGMENT TYPE: internal

FEATURE:

NAME/KEY: Peptide

LOCATION: 1..15

OTHER INFORMATION: /label= peptide

PCT-US94-05142-18

QY 1 RAFTVIGK 8  
|||  
8 RAFTVIGK 15

Db 8 RAFTVIGK 15

RESULT 203  
PCT-US94-05142-22  
Sequence 22, Application PC/TUS9405142

GENERAL INFORMATION:

APPLICANT:

TITLE OF INVENTION: COMPOSITE SYNTHETIC PEPTIDE CONSTRUCT

TITLE OF INVENTION: ELICITING NEUTRALIZING ANTIBODIES AND CYTOTOXIC T

TITLE OF INVENTION: LYMPHOCYTES AGAINST HIV

NUMBER OF SEQUENCES: 36

CORRESPONDENCE ADDRESS:

ADDRESS: Birch, Stewart, Kolasch & Birch

STREET: P.O. Box 747

CITY: Falls Church



STATE: Virginia  
COUNTRY: USA  
ZIP: 22040-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US94/05142  
FILING DATE: 13-MAY-1994  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/060,988  
FILING DATE: 14-MAY-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30330  
REFERENCE/DOCKET NUMBER: 1173-434P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-205-8000  
TELEFAX: 703-205-8050  
INFORMATION FOR SEQ ID NO: 22:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FRAGMENT TYPE: internal  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..15  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "p18-14, see Table V"  
PCT-US94-05142-22

Query Match 84.6%; Score 33; DB 5; Length 15;  
Best Local Similarity 87.5%; Pred. No. 1.4;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFTYIG 8  
|||  
Db 8 RAFTYIAK 15

RESULT 204  
US-08-257-5288-51  
Sequence 51, Application US/082575288  
Patent No. 5639854  
GENERAL INFORMATION:  
APPLICANT: SIA, Charles D.Y.  
APPLICANT: CHONG, Pele  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: MSG 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/257,5288  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.

REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-336 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 51:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-257-5288-51

Query Match 74.4%; Score 29; DB 1; Length 20;  
Best Local Similarity 85.7%; Pred. No. 13;  
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFTYIG 7  
|||  
Db 14 RAFTYIG 20

RESULT 205  
US-08-460-602A-51  
Sequence 51, Application US/08460602A  
Patent No. 5759769  
GENERAL INFORMATION:  
APPLICANT: SIA, Charles D.Y.  
APPLICANT: CHONG, Pele  
APPLICANT: KLEIN, Michel H.  
TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sim & McBurney  
STREET: Suite 701, 330 University Avenue  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: MSG 1R7  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/460,602A  
FILING DATE: 02-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/257,528  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/073,378  
FILING DATE: 09-JUN-1993  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: STEWART, MICHAEL I.  
REGISTRATION NUMBER: 24,973  
REFERENCE/DOCKET NUMBER: 1038-450 MIS:jb  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 595-1155  
TELEFAX: (416) 595-1163  
INFORMATION FOR SEQ ID NO: 51:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-460-602A-51

Query Match 74.4%; Score 29; DB 1; Length 20;  
Best Local Similarity 85.7%; Pred. No. 13;

Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFYTG 7  
|||  
Db 14 RAFYTG 20

## RESULT 206

US-08-463-966A-51  
; Sequence 51, Application US/08463966A  
; Patent No. 5795955  
; GENERAL INFORMATION:  
; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; APPLICANT: KLEIN, Michel H.  
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
; NUMBER OF SEQUENCES: 101  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: Suite 701, 330 University Avenue  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: M5G 1R7

COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/463,966A  
; FILING DATE: 05-JUN-1995  
; CLASSIFICATION: 424  
; PRIORITY APPLICATION DATA:  
; APPLICATION NUMBER: 08/257,528  
; FILING DATE: 09-JUN-1994  
; CLASSIFICATION: 424

PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/073,378  
; FILING DATE: 09-JUN-1993  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: STEWART, MICHAEL I.  
; REGISTRATION NUMBER: 24,973  
; REFERENCE/DOCKET NUMBER: 1038-487 MIS:jb  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 595-1155  
; TELEFAX: (416) 595-1163  
; INFORMATION FOR SEQ ID NO: 51:

SEQUENCE CHARACTERISTICS:  
; LENGTH: 20 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-463-966A-51

Query Match 74.4%; Score 29; DB 1; Length 20;  
Best Local Similarity 85.7%; Pred. No. 13;  
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFYTG 7  
|||  
Db 14 RAFYTG 20

## RESULT 207

US-08-465-217A-51  
; Sequence 51, Application US/08465217A  
; Patent No. 5800822  
; GENERAL INFORMATION:  
; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; APPLICANT: KLEIN, Michel H.

TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
; NUMBER OF SEQUENCES: 101  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: Suite 701, 330 University Avenue  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: M5G 1R7

COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/465,217A  
; FILING DATE: 05-JUN-1995  
; CLASSIFICATION: 424  
; PRIORITY APPLICATION DATA:  
; APPLICATION NUMBER: 08/257,528  
; FILING DATE: 09-JUN-1994  
; CLASSIFICATION: 424

PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/073,378  
; FILING DATE: 09-JUN-1993  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: STEWART, MICHAEL I.  
; REGISTRATION NUMBER: 24,973  
; REFERENCE/DOCKET NUMBER: 1038-486 MIS:jb  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 595-1155  
; TELEFAX: (416) 595-1163  
; INFORMATION FOR SEQ ID NO: 51:

SEQUENCE CHARACTERISTICS:  
; LENGTH: 20 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-465-217A-51

Query Match 74.4%; Score 29; DB 1; Length 20;  
Best Local Similarity 85.7%; Pred. No. 13;  
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 RAFYTG 7  
|||  
Db 14 RAFYTG 20

RESULT 208  
US-08-464-329A-51  
; Sequence 51, Application US/08464329A  
; Patent No. 5817754  
; GENERAL INFORMATION:  
; APPLICANT: SIA, Charles D.Y.  
; APPLICANT: CHONG, Pele  
; APPLICANT: KLEIN, Michel H.  
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides  
; NUMBER OF SEQUENCES: 101  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sim & McBurney  
; STREET: Suite 701, 330 University Avenue  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: M5G 1R7

COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:

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; APPLICATION NUMBER: US/08/464,329A
; FILING DATE: 05-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/257,528
; FILING DATE: 09-JUN-1994
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/073,378
; FILING DATE: 09-JUN-1993
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, MICHAEL I.
; REGISTRATION NUMBER: 24,973
; TELECOMMUNICATION INFORMATION:
; REFERENCE/DOCKET NUMBER: 1038-449 MIS:jb
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 51:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
US-08-464-329A-51

Query Match      74.4%; Score 29; DB 2; Length 20;
Best Local Similarity 85.7%; Pred. No. 13;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 RAFTYTG 7
Db      14 RAFTYTG 20

RESULT 209
US-08-462-507A-51
; Sequence 51, Application US/08462507A
; Patent No. 5876731
; GENERAL INFORMATION:
; APPLICANT: SIA, Charles D.Y.
; APPLICANT: CHONG, Pele
; APPLICANT: KLEIN, Michel H.
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides
; NUMBER OF SEQUENCES: 101
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: Suite 701, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5G 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/462,507A
; FILING DATE: 05-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/257,528
; FILING DATE: 09-JUN-1994
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/073,378
; FILING DATE: 09-JUN-1993
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, MICHAEL I.
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-451 MIS:jb
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; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 51:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
US-08-462-507A-51

Query Match      74.4%; Score 29; DB 2; Length 20;
Best Local Similarity 85.7%; Pred. No. 13;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 RAFTYTG 7
Db      14 RAFTYTG 20

RESULT 210
US-08-467-881A-51
; Sequence 51, Application US/08467881A
; Patent No. 5951986
; GENERAL INFORMATION:
; APPLICANT: SIA, Charles D.Y.
; APPLICANT: CHONG, Pele
; APPLICANT: KLEIN, Michel H.
; TITLE OF INVENTION: Tandem Synthetic HIV-1 Peptides
; NUMBER OF SEQUENCES: 101
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sim & McBurney
; STREET: Suite 701, 330 University Avenue
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5G 1R7
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/467,881A
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/257,528
; FILING DATE: 09-JUN-1994
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/073,378
; FILING DATE: 09-JUN-1993
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: STEWART, MICHAEL I.
; REGISTRATION NUMBER: 24,973
; REFERENCE/DOCKET NUMBER: 1038-488 MIS:jb
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 595-1155
; TELEFAX: (416) 595-1163
; INFORMATION FOR SEQ ID NO: 51:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
US-08-467-881A-51

Query Match      74.4%; Score 29; DB 2; Length 20;
Best Local Similarity 85.7%; Pred. No. 13;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

OY 1 RAFTIG 7  
|||  
Db 14 RAFTIG 20

RESULT 211  
US-09-820-484-8  
; Sequence 8, Application US/09820484  
; Patent No. 6534062  
; GENERAL INFORMATION:  
; APPLICANT: Raz, Eyal  
; APPLICANT: Cho, Hearn Jay  
; APPLICANT: Richman, Douglas  
; APPLICANT: Horner, Anthony A.  
; TITLE OF INVENTION: Method for increasing a cytotoxic T  
; TITLE OF INVENTION: Lymphocyte Response in vivo.  
; FILE REFERENCE: 06510-188051  
; CURRENT APPLICATION NUMBER: US/09/820,484  
; PRIOR FILING DATE: 2001-03-28  
; PRIOR APPLICATION NUMBER: US 60/192,537  
; PRIOR FILING DATE: 2000-03-28  
; PRIOR APPLICATION NUMBER: US 60/203,567  
; PRIOR FILING DATE: 2000-05-11  
; PRIOR APPLICATION NUMBER: US 60/215,895  
; PRIOR FILING DATE: 2000-07-05  
; NUMBER OF SEQ ID NOS: 8  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO: 8  
; LENGTH: 10  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: HIV-1 class I-restricted gp120 peptide  
US-09-820-484-8

Query Match 71.8%; Score 28; DB 4; Length 10;  
Best Local Similarity 100.0%; Pred. No. 11;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFTI 6  
|||  
Db 5 RAFTI 10

RESULT 212  
US-09-430-470-24  
; Sequence 24, Application US/09430470  
; Patent No. 6562800  
; GENERAL INFORMATION:  
; APPLICANT: McMillan, Minnie  
; TITLE OF INVENTION: THE USE OF IMMUNOPOTENTIATING SEQUENCES  
; TITLE OF INVENTION: FOR INDUCING IMMUNE RESPONSE  
; FILE REFERENCE: 13761-725  
; CURRENT APPLICATION NUMBER: US/09/430,470  
; PRIOR FILING DATE: 1998-10-29  
; EARLIER APPLICATION NUMBER: US 60/106,506  
; EARLIER FILING DATE: 1998-10-30  
; NUMBER OF SEQ ID NOS: 25  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO: 24  
; LENGTH: 10  
; TYPE: PRT  
; ORGANISM: Human immunodeficiency virus (HIV)  
; FEATURE:  
; OTHER INFORMATION: Residues 318-327 of gp120 (Genbank accession  
; OTHER INFORMATION: number g1224364)  
US-09-430-470-24

Query Match 71.8%; Score 28; DB 4; Length 10;  
Best Local Similarity 100.0%; Pred. No. 11;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFTI 6

Db 5 RAFTI 10

RESULT 213  
US-08-937-276A-5  
; Sequence 5, Application US/08937276A  
; Patent No. 6592872  
; GENERAL INFORMATION:  
; APPLICANT: Kimpel, Kurt  
; APPLICANT: Goletz, Theresa J.  
; APPLICANT: Arora, Naveen  
; APPLICANT: Leppla, Stephen H.  
; APPLICANT: Berzofsky, Jay A.  
; TITLE OF INVENTION: Targeting Antigens to the MHC Class I  
; TITLE OF INVENTION: Processing Pathway With an Anthrax Toxin Fusion Protein  
; NUMBER OF SEQUENCES: 5  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; OPERATING SYSTEM: IBM PC compatible  
; SOFTWARE: Patentin Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/937,276A  
; FILING DATE: 15-Sep-1997  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/025,270  
; FILING DATE: 17-Sep-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Weber, Kenneth A.  
; REGISTRATION NUMBER: 31,677  
; REFERENCE/DOCKET NUMBER: 015280-290100US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 5:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 10 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: <Unknown>  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; SEQUENCE DESCRIPTION: SEQ ID NO: 5:  
US-08-937-276A-5

Query Match 71.8%; Score 28; DB 4; Length 10;  
Best Local Similarity 100.0%; Pred. No. 11;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RAFTI 6  
|||  
Db 5 RAFTI 10

RESULT 214  
US-09-454-204A-51  
; Sequence 51, Application US/09454204A  
; Patent No. 6663871  
; GENERAL INFORMATION:  
; APPLICANT: McMichael, Andrew  
; APPLICANT: Hill, Adrian V.S.  
; APPLICANT: Gilbert, Sarah C.  
; APPLICANT: Schneider, Jorg  
; APPLICANT: Piebanek, Magdalena  
; APPLICANT: Hanke, Tomas

APPLICANT: Smith, Geoffrey L.  
TITLE OF INVENTION: Blanchard, Tom  
TITLE OF INVENTION: Methods and Reagents for Vaccination  
FILE REFERENCE: 2907.1000-000  
CURRENT APPLICATION NUMBER: US/09/454, 204A  
CURRENT FILING DATE: 1999-12-09  
PRIOR APPLICATION NUMBER: PCT/GB98/01681  
PRIOR FILING DATE: 1998-06-09  
PRIOR APPLICATION NUMBER: GB 97 11957.2  
PRIOR FILING DATE: 1997-06-09  
NUMBER OF SEQ ID NOS: 78  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 51  
LENGTH: 10  
TYPE: PRT  
ORGANISM: Unknown  
FEATURE:  
OTHER INFORMATION: CTL Epitope of HIV-1 gp120  
US-09-454-204A-51

Query Match 71.8%; Score 28; DB 4; Length 10;  
Best Local Similarity 100.0%; Pred. No. 11;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTYI 6  
Db 5 RAFTYI 10

RESULT 215  
US-09-454-204A-68

Sequence 68; Application US/09454204A  
Patent No. 6663871  
GENERAL INFORMATION:  
APPLICANT: McMichael, Andrew  
APPLICANT: Hill, Adrian V.S.  
APPLICANT: Gilbert, Sarah C.  
APPLICANT: Schneider, Jorg  
APPLICANT: Plebanski, Magdalena  
APPLICANT: Hanke, Tomas  
APPLICANT: Smith, Geoffrey L.  
APPLICANT: Blanchard, Tom  
TITLE OF INVENTION: Methods and Reagents for Vaccination  
FILE REFERENCE: 2907.1000-000  
CURRENT APPLICATION NUMBER: US/09/454, 204A  
CURRENT FILING DATE: 1999-12-09  
PRIOR APPLICATION NUMBER: PCT/GB98/01681  
PRIOR FILING DATE: 1998-06-09  
PRIOR APPLICATION NUMBER: GB 97 11957.2  
PRIOR FILING DATE: 1997-06-09  
NUMBER OF SEQ ID NOS: 78  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 68  
LENGTH: 10  
TYPE: PRT  
ORGANISM: Unknown  
FEATURE:  
OTHER INFORMATION: CTL Peptide Epitope of HIV gag  
US-09-454-204A-68

Query Match 71.8%; Score 28; DB 4; Length 10;  
Best Local Similarity 100.0%; Pred. No. 11;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTYI 6  
Db 5 RAFTYI 10

RESULT 216  
US-09-508-552-16

Sequence 16; Application US/09508552  
Patent No. 6743856  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Belyakov, Igor M.  
APPLICANT: Derby, Michael A.  
APPLICANT: Kelsall, Brian L.  
APPLICANT: Strober, Warren  
TITLE OF INVENTION: THE GOVERNMENT OF THE UNITED STATES OF AMERICA, as  
APPLICANT: MUCOSAL CYTOTOXIC T LYMPHOCYTE RESPONSES  
FILE REFERENCE: 368200PCE50  
CURRENT APPLICATION NUMBER: US/09/508, 552  
CURRENT FILING DATE: 2000-06-12  
PRIOR APPLICATION NUMBER: 60/058, 523  
PRIOR FILING DATE: 1997-09-11  
PRIOR APPLICATION NUMBER: 60/074, 894  
PRIOR FILING DATE: 1998-02-17  
NUMBER OF SEQ ID NOS: 20  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 16  
LENGTH: 10  
TYPE: PRT  
ORGANISM: Human immunodeficiency virus type 1  
US-09-508-552-16

Query Match 71.8%; Score 28; DB 4; Length 10;  
Best Local Similarity 100.0%; Pred. No. 11;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RAFTYI 6  
Db 5 RAFTYI 10

RESULT 217  
US-07-847-311A-20

Sequence 20; Application US/07847311A  
Patent No. 5976541  
GENERAL INFORMATION:  
APPLICANT: Berzofsky, Jay A.  
APPLICANT: Takeshita, Toshiyuki  
APPLICANT: Shirai, Mutsunori  
APPLICANT: Pendleton, C.D.  
APPLICANT: Koslowaki, Steven  
APPLICANT: Margulies, David H.  
TITLE OF INVENTION: Potent Peptide for Stimulation of  
CYTOTOXIC T LYMPHOCYTES SPECIFIC FOR THE HIV-1 ENVELOPE  
NUMBER OF SEQUENCES: 20  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Birch, Stewart, Kolaish & Birch  
STREET: 301 N. Washington  
CITY: Falls Church  
STATE: Virginia  
COUNTRY: USA  
ZIP: 22046-0747  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/07/847,311A  
FILING DATE: 06-MAR-1992  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Svensson, Leonard R.  
REGISTRATION NUMBER: 30,330  
REFERENCE/DOCKET NUMBER: 1173-392P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-241-1300  
TELEFAX: 703-241-2848  
INFORMATION FOR SEQ ID NO: 20:  
SEQUENCE CHARACTERISTICS:

LENGTH: 13 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
HYPOTHETICAL: NO  
FRAGMENT TYPE: internal  
ORIGINAL SOURCE:  
ORGANISM: Human Immunodeficiency Virus Type I  
STRAIN: IIB  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..13  
OTHER INFORMATION: /label= peptide  
OTHER INFORMATION: /note= "Active peptide of HIV-1 envelope  
OTHER INFORMATION: from strain IIB"  
US-07-847-311A-20  
glycoprotein

Query Match 71.8%; Score 28; DB 2; Length 13;  
Best Local Similarity 100.0%; Pred. No. 14;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFYTI 6  
|||  
Db 8 RAFYTI 13

RESULT 218  
US-08-930-917A-14  
Sequence 14, Application US/08930917A  
Patent No. 6146635  
GENERAL INFORMATION:  
APPLICANT: DUARTE CANO, C. A.  
APPLICANT: GUILI, N. NIETO, G. E.  
APPLICANT: MART N DUNN, A. M.  
APPLICANT: ALVAREZ ACOSTA, A.  
APPLICANT: CARPIO MUÑOZ, E. L.  
APPLICANT: QUINTANA V. D.  
APPLICANT: G MEZ RODR GUEZ, C. E.  
APPLICANT: SILVA RODR GUEZ, R. C.  
APPLICANT: NAZ BAL G LVEZ, C.  
APPLICANT: LEAL ANGULO, M. J.  
TITLE OF INVENTION: System for the expression of heterologous  
TITLE OF INVENTION: antigens as fusion proteins  
NUMBER OF SEQUENCES: 21  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Lackenbach Siegel Marzullo Aronson & Greenspan  
STREET: One Chase Road  
CITY: Scarsdale  
STATE: New York  
COUNTRY: U.S.  
ZIP: 10583  
COMPUTER READABLE FORM:  
MEDIUM TYPE: floppy disk 3.5" (1.4 MB).  
COMPUTER: Compatible PC IBM (80486, 8 M Ram).  
OPERATING SYSTEM: Windows 95.  
SOFTWARE: Word Perfect 5.0 for Windows 95.  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/930,917A  
FILING DATE: 16-Sep-1997  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: PCT/US97/00001  
FILING DATE: 17-Jan-1997  
ATTORNEY/AGENT INFORMATION:  
NAME: HENRY A. MARZULLO, JR.  
REGISTRATION NUMBER: 20,910  
REFERENCE/DOCKET NUMBER: P-13  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (914) 723-4300  
TELEFAX: (914) 723-4301  
INFORMATION FOR SEQ ID NO: 14:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 Amino acid residues

TYPE: Amino acid  
STRANDEDNESS: Unknown  
TOPOLOGY: Unknown  
MOLECULE TYPE: Peptide  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
FRAGMENT TYPE: Internal fragment  
ORIGINAL SOURCE:  
ORGANISM: VIH-1  
INDIVIDUAL ISOLATE: IIB  
FEATURE:  
OTHER INFORMATION: Central region of the loop V3 belonging to the  
OTHER INFORMATION: protein gp120 from the VIH-1, isolation IIB.  
US-08-930-917A-14

Query Match 71.8%; Score 28; DB 3; Length 15;  
Best Local Similarity 100.0%; Pred. No. 16;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFYTI 6  
|||  
Db 10 RAFYTI 15

RESULT 219  
US-08-493-235-23  
Sequence 23, Application US/08493235  
Patent No. 5840313  
GENERAL INFORMATION:  
APPLICANT: Valhne, Anders  
APPLICANT: Svennerholm, Bo  
APPLICANT: Rymo, Lars  
APPLICANT: Jeansson, Stig  
APPLICANT: Horal, Peter  
TITLE OF INVENTION: PEPTIDES FOR USE IN VACCINATION AND  
TITLE OF INVENTION: INDUCTION OF NEUTRALIZING ANTIBODIES AGAINST HUMAN  
TITLE OF INVENTION: IMMUNODEFICIENCY VIRUS  
NUMBER OF SEQUENCES: 41  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: KNOBE, MARTENS, OLSON AND BEAR  
STREET: 620 NEWPORT CENTER DRIVE 16TH FLOOR  
CITY: NEWPORT BEACH  
STATE: CA  
COUNTRY: USA  
ZIP: 92660  
COMPUTER READABLE FORM:  
MEDIUM TYPE: floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/493,235  
FILING DATE: 20(June)1995  
CLASSIFICATION: 530  
ATTORNEY/AGENT INFORMATION:  
NAME: Kalsner, Annemarie  
REGISTRATION NUMBER: 37,649  
REFERENCE/DOCKET NUMBER: METRICS 12CPCI  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 619-235-8550  
TELEFAX: 619-235-0176  
INFORMATION FOR SEQ ID NO: 23:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 25 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
FRAGMENT TYPE: internal  
US-08-493-235-23

Query Match 71.8%; Score 28; DB 2; Length 25;  
Best Local Similarity 100.0%; Pred. No. 26;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RAFYTI 6  
|||  
Db 20 RAFYTI 25

## RESULT 220

US-08-279-906A-26  
; Sequence 26, Application US/08279906A  
; Patent No. 5618922  
; GENERAL INFORMATION:  
; APPLICANT: Ohno, Tsuneya  
; APPLICANT: Terada, Masaki  
; APPLICANT: Yoneda, Yukio  
; TITLE OF INVENTION: NM03 Antibody Materials and Methods  
; NUMBER OF SEQUENCES: 27  
; CORRESPONDENCE ADDRESSES:  
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &  
; ADDRESSEE: Borun  
; STREET: 6300 Sears Tower, 233 S. Wacker Drive  
; CITY: Chicago  
; STATE: Illinois  
; COUNTRY: USA  
; ZIP: 60606  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/279,906A  
; FILING DATE:  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: No. 5618922and, Greta E.  
; REGISTRATION NUMBER: 35,302  
; REFERENCE/DOCKET NUMBER: 32028  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (312) 474-6300  
; TELEFAX: (312) 474-0448  
; TELEX: 25-3856  
; INFORMATION FOR SEQ ID NO: 26:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 20 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; US-08-279-906A-26

Query Match 66.7%; Score 26; DB 1; Length 20;  
Best Local Similarity 62.5%; Pred. No. 56;  
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 RAFYTIK 8  
|||  
Db 6 RAFYTIK 13

## RESULT 221

US-09-902-540-11814  
; Sequence 11814, Application US/09902540  
; Patent No. 6833447  
; GENERAL INFORMATION:  
; APPLICANT: Goldman, Barry S.  
; APPLICANT: Hinkle, Gregory J.  
; APPLICANT: Slater, Steven C.  
; APPLICANT: Wiegand, Roger C.  
; TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof  
; FILE REFERENCE: 38-10(115849)B  
; CURRENT APPLICATION NUMBER: US/09/902,540

; CURRENT FILING DATE: 2001-07-10  
; PRIOR APPLICATION NUMBER: 60/217,883  
; PRIOR FILING DATE: 2000-07-10  
; NUMBER OF SEQ ID NOS: 16825  
; SEQ ID NO 11814  
; LENGTH: 23  
; TYPE: PRT  
; ORGANISM: Myxococcus xanthus  
; US-09-902-540-11814

Query Match 66.7%; Score 26; DB 4; Length 23;  
Best Local Similarity 71.4%; Pred. No. 64;  
Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 AFYTIK 8  
|||  
Db 6 AFYTIK 12

## RESULT 222

US-08-986-234-17  
; Sequence 17, Application US/08986234  
; Patent No. 5981706  
; GENERAL INFORMATION:  
; APPLICANT: Wallen, et al.  
; TITLE OF INVENTION: Methods for Synthesizing Heat Shock Protein Complexes  
; FILE REFERENCE: UMME-0008-1  
; CURRENT APPLICATION NUMBER: US/08/986,234  
; CURRENT FILING DATE: 1997-12-05  
; NUMBER OF SEQ ID NOS: 114  
; SOFTWARE: Patentin Ver. 2.0  
; SEQ ID NO 17  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: Human immunodeficiency virus  
; US-08-986-234-17

Query Match 64.1%; Score 25; DB 2; Length 15;  
Best Local Similarity 62.5%; Pred. No. 69;  
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 RAFYTIK 8  
|||  
Db 8 RAFYTIK 15

## RESULT 223

US-08-333-565-16  
; Sequence 16, Application US/08333565  
; Patent No. 5622852  
; GENERAL INFORMATION:  
; APPLICANT: KORSMEYER, Stanley J.  
; TITLE OF INVENTION: Bcl-x/Bcl-2 ASSOCIATED CELL DEATH  
; NUMBER OF SEQUENCES: 59  
; CORRESPONDENCE ADDRESSES:  
; ADDRESSEE: Townsend and Townsend Khourie and Crew  
; STREET: 379 Lytton Avenue  
; CITY: Palo Alto  
; STATE: California  
; COUNTRY: US  
; ZIP: 94301  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/333,565  
; FILING DATE: 31-OCT-1994  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Smith, William M

REGISTRATION NUMBER: 30,223  
REFERENCE/DOCKET NUMBER: 15726A-000700  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 326-2400  
TELEFAX: (415) 326-2422  
INFORMATION FOR SEQ ID NO: 16:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 17 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-333-565-16

Query Match 64.1%; Score 25; DB 1; Length 17;  
Best Local Similarity 66.7%; Pred. No. 78;  
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 3 FVITIGK 8  
|:|:|  
Db 12 FVITIGK 17

RESULT 224  
US-08-661-479-16  
Sequence 16, Application US/08661479  
Patent No. 5834209  
GENERAL INFORMATION:  
APPLICANT: KORSMEYER, Stanley J.  
TITLE OF INVENTION: Bcl-X/Bcl-2 ASSOCIATED CELL DEATH  
NUMBER OF SEQUENCES: 59  
CORRESPONDENCE ADDRESSES:  
ADDRESS: Townsend and Townsend Khourie and Crew  
STREET: 379 Lytton Avenue  
CITY: Palo Alto  
STATE: California  
COUNTRY: US  
ZIP: 94301  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/661,479  
FILING DATE: 11-JUN-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/333,565  
FILING DATE: 31-OCT-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Smith, William M.  
REGISTRATION NUMBER: 30,223  
REFERENCE/DOCKET NUMBER: 15726A-000700  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 326-2400  
TELEFAX: (415) 326-2422  
INFORMATION FOR SRO ID NO: 16:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 17 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-661-479-16

Query Match 64.1%; Score 25; DB 2; Length 17;  
Best Local Similarity 66.7%; Pred. No. 78;  
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;  
QY 3 FVITIGK 8  
|:|:|

Db 12 FVITIGK 17

RESULT 225  
US-08-100-118-6  
Sequence 6, Application US/08100118  
Patent No. 5580773  
GENERAL INFORMATION:  
APPLICANT: Kang, Chul-Yong  
TITLE OF INVENTION: Design, Construction and Expression  
TITLE OF INVENTION: of Chimeric Proteins for Development of AIDS  
TITLE OF INVENTION: Vaccines and Diagnostic Reagents  
NUMBER OF SEQUENCES: 19  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Merchant & Gould  
STREET: 3100 No. 5580773west Center  
CITY: Minneapolis  
STATE: MN  
COUNTRY: USA  
ZIP: 55402  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/100,118  
FILING DATE: 19930730  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Strodtloff, Kristine M.  
REGISTRATION NUMBER: 34,259  
REFERENCE/DOCKET NUMBER: 8682.6-US-01  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 612-332-5300  
TELEFAX: 612-332-9081  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 18 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
IMMEDIATE SOURCE:  
CLONE: Consensus Sequence (CS) of HIV-1 V3 loop  
Patent No. 5580773  
US-08-100-118-6

Query Match 64.1%; Score 25; DB 1; Length 18;  
Best Local Similarity 62.5%; Pred. No. 82;  
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 RAVYITGE 8  
|:|:|  
Db 11 RAVYITGE 18

RESULT 226  
US-08-323-192D-51  
Sequence 51, Application US/08323192D  
Patent No. 5786199  
GENERAL INFORMATION:  
APPLICANT: Palese, Peter  
TITLE OF INVENTION: RECOMBINANT NEGATIVE STRAND RNA VIRUS  
TITLE OF INVENTION: EXPRESSION SYSTEMS AND VACCINES  
NUMBER OF SEQUENCES: 70  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10036-2711



COMPUTER READABLE FORM:  
MEDIUM TYPE: FLOPPY disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/323,192D  
FILING DATE: 14-OCT-1994  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Coruzzi, Laura A.  
REGISTRATION NUMBER: 30,742  
REFERENCE/DOCKET NUMBER: 7682-035  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-9741/8864  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 51:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 19 amino acids  
TYPE: amino acid  
STRANDEDNESS:  
TOPOLOGY: unknown  
MOLECULE TYPE: peptide  
US-08-323-192D-51

Query Match 64.1%; Score 25; DB 1; Length 19;  
Best Local Similarity 62.5%; Pred. No. 87;  
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Oy 1 RAFTYICK 8  
Db 10 RAFTYICK 17

RESULT 227  
US-08-975-699-15  
Sequence 15, Application US/089756699  
Patent No. 5858369  
GENERAL INFORMATION:  
APPLICANT: MATSUO, KAZUHIRO  
APPLICANT: CHUJO, YOSHITOMO  
APPLICANT: YAMAZAKI, AKIHIRO  
APPLICANT: HONDA, MITSUO  
APPLICANT: YAMAKAZI, SHUDO  
APPLICANT: TASAKA, HIROMICHI  
TITLE OF INVENTION: ANTI-AIDS SECRETORY RECOMBINANT BCG  
TITLE OF INVENTION: VACCINE  
NUMBER OF SEQUENCES: 27  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,  
ADDRESS: P.C.  
STREET: 1755 S. JEFFERSON DAVIS HIGHWAY, SUITE 400  
CITY: ARLINGTON  
STATE: VA  
COUNTRY: USA  
ZIP: 22202  
COMPUTER READABLE FORM:  
MEDIUM TYPE: FLOPPY disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/975,699  
FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/619,512  
FILING DATE: 29-MAR-1996  
APPLICATION NUMBER: PCT/JP95/01515  
FILING DATE: 31-JUL-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: JP 178462/1994

FILING DATE: 29-JUL-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: OBLON, NORMAN F.  
REGISTRATION NUMBER: 24,618  
REFERENCE/DOCKET NUMBER: 10-795-0X PCT  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-413-3000  
TELEFAX: 703-413-2220  
INFORMATION FOR SEQ ID NO: 15:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 19 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS  
STRAIN: HIV-1  
US-08-975-699-15

Query Match 64.1%; Score 25; DB 2; Length 19;  
Best Local Similarity 62.5%; Pred. No. 87;  
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Oy 1 RAFTYICK 8  
Db 12 RAFTYICK 19

RESULT 228  
US-08-972-089-15  
Sequence 15, Application US/08972089  
Patent No. 5855580  
GENERAL INFORMATION:  
APPLICANT: MATSUO, KAZUHIRO  
APPLICANT: CHUJO, YOSHITOMO  
APPLICANT: YAMAZAKI, AKIHIRO  
APPLICANT: HONDA, MITSUO  
APPLICANT: YAMAKAZI, SHUDO  
APPLICANT: TASAKA, HIROMICHI  
TITLE OF INVENTION: ANTI-AIDS SECRETORY RECOMBINANT BCG  
TITLE OF INVENTION: VACCINE  
NUMBER OF SEQUENCES: 27  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,  
ADDRESS: P.C.  
STREET: 1755 S. JEFFERSON DAVIS HIGHWAY, SUITE 400  
CITY: ARLINGTON  
STATE: VA  
COUNTRY: USA  
ZIP: 22202  
COMPUTER READABLE FORM:  
MEDIUM TYPE: FLOPPY disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/972,089  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/975,699  
FILING DATE:  
APPLICATION NUMBER: PCT/JP95/01515  
FILING DATE: 31-JUL-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: JP 178462/1994  
FILING DATE: 29-JUL-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: OBLON, NORMAN F.  
REGISTRATION NUMBER: 24,618  
REFERENCE/DOCKET NUMBER: 10-795-0X PCT  
TELECOMMUNICATION INFORMATION:

TELEPHONE: 703-413-3000  
TELEFAX: 703-413-2220  
INFORMATION FOR SEQ ID NO: 15:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 19 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: HUMAN IMMUNODEFICIENT VIRUS  
STRAIN: HIV-1  
US-08-972-089-15

Query Match 64.1%; Score 25; DB 2; Length 19;  
Best Local Similarity 62.5%; Pred. No. 87;  
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
Db 12 RAFYTTGE 19

RESULT 229  
US-08-363-276B-1  
Sequence 1, Application US/08363276B  
Patent No. 5969109  
GENERAL INFORMATION:  
APPLICANT: BONA ET AL.  
TITLE OF INVENTION: CHIMERIC ANTIBODIES  
NUMBER OF SEQUENCES: 27  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Brumbaugh, Graves, Donohue &  
STREET: 30 Rockefeller Plaza  
CITY: New York  
STATE: NY  
COUNTRY: USA  
ZIP: 10112-0228  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq Version 1.5  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/363.276B  
FILING DATE: 22-DECEMBER-1994  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: USSN 07/486,546  
FILING DATE: 28-FEBRUARY-1990 (ABANDONED)  
APPLICATION NUMBER: USSN 07/687,376  
FILING DATE: 18-APRIL-1991 (ABANDONED)  
APPLICATION NUMBER: USSN 08/327,636  
FILING DATE: 24-OCTOBER-1994 (ABANDONED)  
ATTORNEY/AGENT INFORMATION:  
NAME: Clark, Richard S  
REGISTRATION NUMBER: 26,154  
REFERENCE/DOCKET NUMBER: 29889-165/29528  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212-408-2558  
TELEFAX: 212-765-2519  
TELEX:  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 19 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: Human Immunodeficiency Virus Type 1

FEATURE:  
NAME/KEY:  
LOCATION: 301...319  
OTHER INFORMATION: Envelope Protein gp120  
US-08-363-276B-1

Query Match 64.1%; Score 25; DB 2; Length 19;  
Best Local Similarity 62.5%; Pred. No. 87;  
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
Db 10 RAFYTTGE 17

RESULT 230  
US-08-755-034-1  
Sequence 1, Application US/08755034  
Patent No. 6204250  
GENERAL INFORMATION:  
APPLICANT: BOT and BONA  
TITLE OF INVENTION: IMMUNIZATION OF INFANTS  
NUMBER OF SEQUENCES: 20  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Brumbaugh, Graves, Donohue &  
STREET: 30 Rockefeller Plaza  
CITY: New York  
STATE: NY  
COUNTRY: USA  
ZIP: 10112-0228  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq Version 1.5  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/755.034  
FILING DATE: 22-NOVEMBER-1996  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER:  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Clark, Richard S  
REGISTRATION NUMBER: 26,154  
REFERENCE/DOCKET NUMBER: 29889-165/29528  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212-408-2558  
TELEFAX: 212-765-2519  
TELEX:  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 19 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: Human Immunodeficiency Virus Type 1  
FEATURE:  
NAME/KEY:  
LOCATION: 301...319  
OTHER INFORMATION: Envelope Protein gp120  
US-08-755-034-1

Query Match 64.1%; Score 25; DB 3; Length 19;  
Best Local Similarity 62.5%; Pred. No. 87;  
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 RAFVTIGK 8  
Db 10 RAFYTTGE 17

```
RESULT 231
US-10-125-594-6
Sequence 6, Application US/10125594
Patent No. 6740747
GENERAL INFORMATION:
APPLICANT: Kaushik, Azad
APPLICANT: Saini, Surinder Singh
TITLE OF INVENTION: No. 6740747a1 Bovine VDJ Cassette, BPH1, Suitable for Antigeniza
FILE REFERENCE: 12837-4
CURRENT APPLICATION NUMBER: US/10/125,594
CURRENT FILING DATE: 2002-04-19
PRIOR APPLICATION NUMBER: US 60/284,899
PRIOR FILING DATE: 2001-04-20
NUMBER OF SEQ ID NOS: 11
SOFTWARE: PatentIn version 3.1
SEQ ID NO: 6
LENGTH: 19
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Human HIV-1
US-10-125-594-6

Query Match          64.1%; Score 25; DB 4; Length 19;
Best Local Similarity 62.5%; Pred. No. 87;
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY      1 RAFYTGK 8
      ||| |||
      10 RAFYTTGE 17

RESULT 232
PCT-US95-16718-1
Sequence 1, Application PC/TUS9516718
GENERAL INFORMATION:
APPLICANT: MOUNT SINAI SCHOOL OF MEDICINE OF THE
APPLICANT: CITY UNIVERSITY OF NEW YORK
TITLE OF INVENTION: CHIMERIC ANTIBODIES
TITLE OF INVENTION: COMPRISING ANTIGEN BINDING SITES AND B AND T CELL EPITOPES
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: Brumbaugh, Graves, Donohue &
ADDRESS: Raymond
STREET: 30 Rockefeller Plaza
CITY: New York
STATE: NY
COUNTRY: USA
ZIP: 10112-0228
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/16718
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Richard S
REGISTRATION NUMBER: 26,154
REFERENCE/DOCKET NUMBER: 29889-165/29528
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-408-2558
TELEFAX: 212-765-2519
TELEX:
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
```

```
LENGTH: 19 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: Human Immunodeficiency Virus Type 1
FEATURE:
NAME/KEY:
LOCATION: 301...319
OTHER INFORMATION: Envelope Protein gp120
PCT-US95-16718-1

Query Match          64.1%; Score 25; DB 5; Length 19;
Best Local Similarity 62.5%; Pred. No. 87;
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY      1 RAFYTGK 8
      ||| |||
      10 RAFYTTGE 17

RESULT 233
PCT-US96-08995-1
Sequence 1, Application PC/TUS9608995
GENERAL INFORMATION:
APPLICANT: MOUNT SINAI SCHOOL OF MEDICINE OF THE CITY
APPLICANT: UNIVERSITY OF NEW YORK
TITLE OF INVENTION: PEGLYLATED MODIFIED PROTEINS
NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
ADDRESSEE: Brumbaugh, Graves, Donohue & Raymond
STREET: 30 Rockefeller Plaza
CITY: New York
STATE: NY
COUNTRY: USA
ZIP: 10112-0228
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US96/08995
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/477,421
FILING DATE: 7-JUNE-1995
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Richard S
REGISTRATION NUMBER: 26,154
REFERENCE/DOCKET NUMBER: 29889-165/29528
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-408-2558
TELEFAX: 212-765-2519
TELEX:
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 19 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: Human Immunodeficiency Virus Type 1
FEATURE:
NAME/KEY:
LOCATION: 301...319
OTHER INFORMATION: Envelope Protein gp120
PCT-US96-08995-1

Query Match          64.1%; Score 25; DB 5; Length 19;
```

Best Local Similarity 62.5%; Pred. No. 87;  
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

OY 1 RAFYTGK 8  
DB 10 RAFYTGK 17

## RESULT 234

US-08-279-906A-27

Sequence 27, Application US/08279906A

Patent No. 5618922

GENERAL INFORMATION:

APPLICANT: Ohno, Tsuneya

APPLICANT: Terada, Masaki

APPLICANT: Yoneda, Yukio

TITLE OF INVENTION: NM03 Antibody Materials and Methods

NUMBER OF SEQUENCES: 27

CORRESPONDENCE ADDRESS:

ADDRESS: Marshall, O'Toole, Gerstein, Murray &amp;

STREET: 6300 Sears Tower, 233 S. Wacker Drive

CITY: Chicago

STATE: Illinois

COUNTRY: USA

ZIP: 60606

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/279,906A

FILING DATE:

CLASSIFICATION: 424

ATTORNEY/AGENT INFORMATION:

NAME: No. 5618922and, Greta E.

REGISTRATION NUMBER: 35,302

REFERENCE/DOCKET NUMBER: 3028

TELECOMMUNICATION INFORMATION:

TELEPHONE: (312) 474-6300

TELEFAX: (312) 474-0448

TELEX: 25-3856

INFORMATION FOR SEQ ID NO: 27:

SEQUENCE CHARACTERISTICS:

LENGTH: 20 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-279-906A-27

Query Match 64.1%; Score 25; DB 1; Length 20;  
Best Local Similarity 62.5%; Pred. No. 91;  
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

OY 1 RAFYTGK 8  
DB 6 RAFYTGK 13

## RESULT 235

US-08-825-852-63

Sequence 63, Application US/08825852

Patent No. 6121416

GENERAL INFORMATION:

APPLICANT: Clark, Ross G1

APPLICANT: Lowman, Henry B.

APPLICANT: Robinson, Iain C.A.F.

TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules

NUMBER OF SEQUENCES: 79

CORRESPONDENCE ADDRESS:

ADDRESSEE: Genentech, Inc.

STREET: 1 DNA Way

CITY: South San Francisco  
STATE: California  
COUNTRY: USA

ZIP: 94080

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: WinPatIn (Genentech)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/825,852

FILING DATE: 04-Apr-1997

CLASSIFICATION: 514

ATTORNEY/AGENT INFORMATION:

NAME: Haasek, Janet E.

REGISTRATION NUMBER: 28,616

REFERENCE/DOCKET NUMBER: P1071

TELECOMMUNICATION INFORMATION:

TELEPHONE: 650/225-1896

TELEFAX: 650/952-9881

INFORMATION FOR SEQ ID NO: 63:

SEQUENCE CHARACTERISTICS:

LENGTH: 20 amino acids

TYPE: Amino Acid

TOPOLOGY: linear

US-08-825-852-63  
Query Match 64.1%; Score 25; DB 3; Length 20;  
Best Local Similarity 57.1%; Pred. No. 91;  
Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

OY 2 AFYTGK 8  
DB 14 AFYAVGK 20

## RESULT 236

US-08-825-852-64

Sequence 64, Application US/08825852

Patent No. 6121416

GENERAL INFORMATION:

APPLICANT: Clark, Ross G1

APPLICANT: Lowman, Henry B.

APPLICANT: Robinson, Iain C.A.F.

TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules

NUMBER OF SEQUENCES: 79

CORRESPONDENCE ADDRESS:

ADDRESSEE: Genentech, Inc.

STREET: 1 DNA Way

CITY: South San Francisco

STATE: California

COUNTRY: USA

ZIP: 94080

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: WinPatIn (Genentech)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/825,852

FILING DATE: 04-Apr-1997

CLASSIFICATION: 514

ATTORNEY/AGENT INFORMATION:

NAME: Haasek, Janet E.

REGISTRATION NUMBER: 28,616

REFERENCE/DOCKET NUMBER: P1071

TELECOMMUNICATION INFORMATION:

TELEPHONE: 650/225-1896

TELEFAX: 650/952-9881

INFORMATION FOR SEQ ID NO: 64:

SEQUENCE CHARACTERISTICS:

LENGTH: 20 amino acids

TYPE: Amino Acid

TOPOLOGY: Linear  
US-08-825-852-64

Query Match 64.1%; Score 25; DB 3; Length 20;  
Best Local Similarity 57.1%; Pred. No. 91;  
Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 AFVTIGK 8  
||: |||  
Db 14 AFMAVGK 20

RESULT 237  
US-09-052-888-64  
Sequence 64, Application US/09052888  
Patent No. 6251865  
GENERAL INFORMATION:  
APPLICANT: Clark, Rose G1  
APPLICANT: Lowman, Henry B.  
APPLICANT: Robinson, Iain C.A.F.  
TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules  
NUMBER OF SEQUENCES: 109  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Genentech, Inc.  
STREET: 1 DNA Way  
CITY: South San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94080  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Winpatin (Genentech)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/052,888  
FILING DATE: 31-Mar-1998  
CLASSIFICATION: 514  
ATTORNEY/AGENT INFORMATION:  
NAME: Hasak, Janet E.  
REGISTRATION NUMBER: 28,616  
REFERENCE/DOCKET NUMBER: P1071P1  
TELEPHONE: 650/225-1896  
TELEFAX: 650/952-9881  
INFORMATION FOR SEQ ID NO: 64:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 amino acids  
TYPE: Amino Acid  
TOPOLOGY: Linear  
US-09-052-888-64

Query Match 64.1%; Score 25; DB 3; Length 20;  
Best Local Similarity 57.1%; Pred. No. 91;  
Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 AFVTIGK 8  
||: |||  
Db 14 AFMAVGK 20

RESULT 238  
US-09-052-888-65  
Sequence 65, Application US/09052888  
Patent No. 6251865  
GENERAL INFORMATION:  
APPLICANT: Clark, Rose G1  
APPLICANT: Lowman, Henry B.  
APPLICANT: Robinson, Iain C.A.F.  
TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules  
NUMBER OF SEQUENCES: 109  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Genentech, Inc.

STREET: 1 DNA Way  
CITY: South San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94080  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Winpatin (Genentech)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/052,888  
FILING DATE: 31-Mar-1998  
CLASSIFICATION: 514  
ATTORNEY/AGENT INFORMATION:  
NAME: Hasak, Janet E.  
REGISTRATION NUMBER: 28,616  
REFERENCE/DOCKET NUMBER: P1071P1  
TELEPHONE: 650/225-1896  
TELEFAX: 650/952-9881  
INFORMATION FOR SEQ ID NO: 65:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 amino acids  
TYPE: Amino Acid  
TOPOLOGY: Linear  
US-09-052-888-65

Query Match 64.1%; Score 25; DB 3; Length 20;  
Best Local Similarity 57.1%; Pred. No. 91;  
Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 AFVTIGK 8  
||: |||  
Db 14 AFMAVGK 20

RESULT 239  
US-09-723-890-64  
Sequence 64, Application US/09723890  
Patent No. 6608031  
GENERAL INFORMATION:  
APPLICANT: Clark, Rose G1  
APPLICANT: Lowman, Henry B.  
APPLICANT: Robinson, Iain C.A.F.  
TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules  
NUMBER OF SEQUENCES: 109  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Genentech, Inc.  
STREET: 1 DNA Way  
CITY: South San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94080  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Winpatin (Genentech)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/723,890  
FILING DATE: 28-No. 6608031-2000  
CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/09/052,888  
FILING DATE: 31-Mar-1998  
ATTORNEY/AGENT INFORMATION:  
NAME: Hasak, Janet E.  
REGISTRATION NUMBER: 28,616  
REFERENCE/DOCKET NUMBER: P1071P1  
TELEPHONE: 650/225-1896  
TELEFAX: 650/952-9881

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; INFORMATION FOR SEQ ID NO: 64:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 20 amino acids
;   TYPE: Amino Acid
;   TOPOLOGY: Linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 64:
US-09-723-890-64

Query Match      64.1%; Score 25; DB 4; Length 20;
Best Local Similarity 57.1%; Pred. No. 91;
Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 AFTVIGK 8
      ||: ||
Db      14 AFMAVGK 20

RESULT 240
US-09-723-890-65
; Sequence 65, Application US/09723890
; Patent No. 6608031
; GENERAL INFORMATION:
;   APPLICANT: Clark, Ross G1
;   Lowman, Henry B.
;   TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules
;   NUMBER OF SEQUENCES: 109
;   CORRESPONDENCE ADDRESS:
;   ADDRESSEE: Genentech, Inc.
;   STREET: 1 DNA Way
;   CITY: South San Francisco
;   STATE: California
;   COUNTRY: USA
;   ZIP: 94080
; COMPUTER READABLE FORM:
;   MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
;   COMPUTER: IBM PC compatible
;   OPERATING SYSTEM: PC-DOS/MS-DOS
;   SOFTWARE: Winpatin (Genentech)
;   CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/09/723,890
;   FILING DATE: 28-Mar-1998
;   CLASSIFICATION: 514
;   PRIOR APPLICATION DATA:
;   APPLICATION NUMBER: US/09/052,888
;   FILING DATE: 31-Mar-1998
;   ATTORNEY/AGENT INFORMATION:
;   NAME: Hasak, Janet E.
;   REGISTRATION NUMBER: 28,616
;   REFERENCE/DOCKET NUMBER: P1071P1
;   TELECOMMUNICATION INFORMATION:
;   TELEPHONE: 650/225-1896
;   TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 65:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 20 amino acids
;   TYPE: Amino Acid
;   TOPOLOGY: Linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 65:
US-09-723-890-65

Query Match      64.1%; Score 25; DB 4; Length 20;
Best Local Similarity 57.1%; Pred. No. 91;
Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 AFTVIGK 8
      ||: ||
Db      14 AFMAVGK 20

RESULT 241
US-09-723-901-64
; Sequence 64, Application US/09723901
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; Patent No. 6620789
; GENERAL INFORMATION:
;   APPLICANT: Clark, Ross G1
;   Lowman, Henry B.
;   TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules
;   NUMBER OF SEQUENCES: 109
;   CORRESPONDENCE ADDRESS:
;   ADDRESSEE: Genentech, Inc.
;   STREET: 1 DNA Way
;   CITY: South San Francisco
;   STATE: California
;   COUNTRY: USA
;   ZIP: 94080
; COMPUTER READABLE FORM:
;   MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
;   COMPUTER: IBM PC compatible
;   OPERATING SYSTEM: PC-DOS/MS-DOS
;   SOFTWARE: Winpatin (Genentech)
;   CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/09/723,901
;   FILING DATE: 28-Mar-1998
;   CLASSIFICATION: <Unknown>
;   PRIOR APPLICATION DATA:
;   APPLICATION NUMBER: 09/052,888
;   FILING DATE: 31-Mar-1998
;   ATTORNEY/AGENT INFORMATION:
;   NAME: Hasak, Janet E.
;   REGISTRATION NUMBER: 28,616
;   REFERENCE/DOCKET NUMBER: P1071P1
;   TELECOMMUNICATION INFORMATION:
;   TELEPHONE: 650/225-1896
;   TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 64:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 20 amino acids
;   TYPE: Amino Acid
;   TOPOLOGY: Linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 64:
US-09-723-901-64

Query Match      64.1%; Score 25; DB 4; Length 20;
Best Local Similarity 57.1%; Pred. No. 91;
Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 AFTVIGK 8
      ||: ||
Db      14 AFMAVGK 20

RESULT 242
US-09-723-901-65
; Sequence 65, Application US/09723901
; Patent No. 6620789
; GENERAL INFORMATION:
;   APPLICANT: Clark, Ross G1
;   Lowman, Henry B.
;   TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules
;   NUMBER OF SEQUENCES: 109
;   CORRESPONDENCE ADDRESS:
;   ADDRESSEE: Genentech, Inc.
;   STREET: 1 DNA Way
;   CITY: South San Francisco
;   STATE: California
;   COUNTRY: USA
;   ZIP: 94080
; COMPUTER READABLE FORM:
;   MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
;   COMPUTER: IBM PC compatible
;   OPERATING SYSTEM: PC-DOS/MS-DOS
;   SOFTWARE: Winpatin (Genentech)
;   CURRENT APPLICATION DATA:
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APPLICATION NUMBER: US/09/723,901  
FILING DATE: 28-Mar-2000  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 09/052,888  
FILING DATE: 31-Mar-1998  
ATTORNEY/AGENT INFORMATION:  
NAME: Hasak, Janet E.  
REGISTRATION NUMBER: 28,616  
REFERENCE/DOCKET NUMBER: P1071P1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 650/225-1896  
TELEFAX: 650/952-9881  
INFORMATION FOR SEQ ID NO: 65:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 amino acids  
TYPE: Amino Acid  
TOPOLOGY: Linear  
SEQUENCE DESCRIPTION: SEQ ID NO: 65:  
US-09-723-901-65

Query Match 64.1%; Score 25; DB 4; Length 20;  
Best Local Similarity 57.1%; Pred. No. 91;  
Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

OY 2 AFVTIGK 8  
||: ||  
Db 14 AFMAVGK 20

RESULT 243  
US-09-723-547-64  
Sequence 64, Application US/09723547  
Patent No. 6632794  
GENERAL INFORMATION:  
APPLICANT: Clark, Ross G1  
Lowman, Henry B.  
Robinson, Iain C.A.F.  
TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules  
NUMBER OF SEQUENCES: 109  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Genentech, Inc.  
STREET: 1 DNA Way  
CITY: South San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94080  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: WinPatIn (Genentech)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/723,547  
FILING DATE: 28-Mar-2000  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 09/052,888  
FILING DATE: <Unknown>  
ATTORNEY/AGENT INFORMATION:  
NAME: Hasak, Janet E.  
REGISTRATION NUMBER: 28,616  
REFERENCE/DOCKET NUMBER: P1071P1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 650/225-1896  
TELEFAX: 650/952-9881  
INFORMATION FOR SEQ ID NO: 64:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 amino acids  
TYPE: Amino Acid  
TOPOLOGY: Linear  
SEQUENCE DESCRIPTION: SEQ ID NO: 64:  
US-09-723-547-64

Query Match 64.1%; Score 25; DB 4; Length 20;  
Best Local Similarity 57.1%; Pred. No. 91;  
Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

OY 2 AFVTIGK 8  
||: ||  
Db 14 AFMAVGK 20

RESULT 244  
US-09-723-547-65  
Sequence 65, Application US/09723547  
Patent No. 6632794  
GENERAL INFORMATION:  
APPLICANT: Clark, Ross G1  
Lowman, Henry B.  
Robinson, Iain C.A.F.  
TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules  
NUMBER OF SEQUENCES: 109  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Genentech, Inc.  
STREET: 1 DNA Way  
CITY: South San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94080  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: WinPatIn (Genentech)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/723,547  
FILING DATE: 28-Mar-2000  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 09/052,888  
FILING DATE: <Unknown>  
ATTORNEY/AGENT INFORMATION:  
NAME: Hasak, Janet E.  
REGISTRATION NUMBER: 28,616  
REFERENCE/DOCKET NUMBER: P1071P1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 650/225-1896  
TELEFAX: 650/952-9881  
INFORMATION FOR SEQ ID NO: 65:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 amino acids  
TYPE: Amino Acid  
TOPOLOGY: Linear  
SEQUENCE DESCRIPTION: SEQ ID NO: 65:  
US-09-723-547-65

Query Match 64.1%; Score 25; DB 4; Length 20;  
Best Local Similarity 57.1%; Pred. No. 91;  
Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

OY 2 AFVTIGK 8  
||: ||  
Db 14 AFMAVGK 20

RESULT 245  
US-09-724-127-64  
Sequence 64, Application US/09724127  
Patent No. 6635619  
GENERAL INFORMATION:  
APPLICANT: Clark, Ross G1  
Lowman, Henry B.  
Robinson, Iain C.A.F.  
TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules  
NUMBER OF SEQUENCES: 109

;; CORRESPONDENCE ADDRESS:  
;; ADDRESSEE: Genentech, Inc.  
;; STREET: 1 DNA Way  
;; CITY: South San Francisco  
;; STATE: California  
;; COUNTRY: USA  
;; ZIP: 94080  
;;  
;; COMPUTER READABLE FORM:  
;; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk  
;; COMPUTER: IBM PC compatible  
;; OPERATING SYSTEM: PC-DOS/MS-DOS  
;; SOFTWARE: WinPatIn (Genentech)  
;;  
;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/09/724,127  
;; FILING DATE: 28-Mar-1998  
;; CLASSIFICATION: <Unknown>  
;;  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: 09/052,888  
;; FILING DATE: 31-Mar-1998  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Hasak, Janet E.  
;; REGISTRATION NUMBER: 28,616  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: 650/225-1896  
;; TELEFAX: 650/952-9881  
;;  
;; INFORMATION FOR SEQ ID NO: 64:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 20 amino acids  
;; TYPE: Amino Acid  
;; TOPOLOGY: Linear  
;;  
;; SEQUENCE DESCRIPTION: SEQ ID NO: 64:  
;;  
;; US-09-724-127-64  
;;  
;; Query Match 64.1%; Score 25; DB 4; Length 20;  
;; Best Local Similarity 57.1%; Pred. No. 91;  
Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
;;  
QY 2 AFTVIGK 8  
||: ||  
Db 14 AFMAVGK 20  
;;  
;; RESULT 246  
;; US-09-724-127-65  
;; Sequence 65, Application US/09724127  
;; Patent No. 6635619  
;; GENERAL INFORMATION:  
;; APPLICANT: Clark, Ross G1  
;; Lowman, Henry B.  
;; Robinson, Iain C.A.F.  
;; TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules  
;; NUMBER OF SEQUENCES: 109  
;; CORRESPONDENCE ADDRESS:  
;; ADDRESSEE: Genentech, Inc.  
;; STREET: 1 DNA Way  
;; CITY: South San Francisco  
;; STATE: California  
;; COUNTRY: USA  
;; ZIP: 94080  
;;  
;; COMPUTER READABLE FORM:  
;; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk  
;; COMPUTER: IBM PC compatible  
;; OPERATING SYSTEM: PC-DOS/MS-DOS  
;; SOFTWARE: WinPatIn (Genentech)  
;;  
;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/09/724,127  
;; FILING DATE: 28-Mar-1998  
;; CLASSIFICATION: <Unknown>  
;;  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: 09/052,888  
;; FILING DATE: 31-Mar-1998  
;; ATTORNEY/AGENT INFORMATION:  
;;

;; NAME: Hasak, Janet E.  
;; REGISTRATION NUMBER: 28,616  
;; REFERENCE/DOCKET NUMBER: P1071P1  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: 650/225-1896  
;; TELEFAX: 650/952-9881  
;;  
;; INFORMATION FOR SEQ ID NO: 65:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 20 amino acids  
;; TYPE: Amino Acid  
;; TOPOLOGY: Linear  
;;  
;; SEQUENCE DESCRIPTION: SEQ ID NO: 65:  
;;  
;; US-09-724-127-65  
;;  
;; Query Match 64.1%; Score 25; DB 4; Length 20;  
;; Best Local Similarity 57.1%; Pred. No. 91;  
Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
;;  
QY 2 AFTVIGK 8  
||: ||  
Db 14 AFMAVGK 20  
;;  
;; RESULT 247  
;; US-09-723-931-64  
;; Sequence 64, Application US/09723931  
;; Patent No. 6645775  
;; GENERAL INFORMATION:  
;; APPLICANT: Clark, Ross G1  
;; Lowman, Henry B.  
;; Robinson, Iain C.A.F.  
;; TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules  
;; NUMBER OF SEQUENCES: 109  
;; CORRESPONDENCE ADDRESS:  
;; ADDRESSEE: Genentech, Inc.  
;; STREET: 1 DNA Way  
;; CITY: South San Francisco  
;; STATE: California  
;; COUNTRY: USA  
;; ZIP: 94080  
;;  
;; COMPUTER READABLE FORM:  
;; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk  
;; COMPUTER: IBM PC compatible  
;; OPERATING SYSTEM: PC-DOS/MS-DOS  
;; SOFTWARE: WinPatIn (Genentech)  
;;  
;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/09/723,931  
;; FILING DATE: 28-Mar-1998  
;; CLASSIFICATION: <Unknown>  
;;  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: 09/052,888  
;; FILING DATE: 31-Mar-1998  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Hasak, Janet E.  
;; REGISTRATION NUMBER: 28,616  
;; REFERENCE/DOCKET NUMBER: P1071P1  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: 650/225-1896  
;; TELEFAX: 650/952-9881  
;;  
;; INFORMATION FOR SEQ ID NO: 64:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 20 amino acids  
;; TYPE: Amino Acid  
;; TOPOLOGY: Linear  
;;  
;; SEQUENCE DESCRIPTION: SEQ ID NO: 64:  
;;  
;; US-09-723-931-64  
;;  
;; Query Match 64.1%; Score 25; DB 4; Length 20;  
;; Best Local Similarity 57.1%; Pred. No. 91;  
Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
;;  
QY 2 AFTVIGK 8  
||: ||



DB 14 AFMAVGK 20

RESULT 248  
US-09-723-931-65  
Sequence 65, Application US/09723931  
Patent No. 6645775  
GENERAL INFORMATION:  
APPLICANT: Clark, Ross G1  
Lowman, Henry B.  
Robinson, Iain C.A.F.  
TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules  
NUMBER OF SEQUENCES: 109  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Genentech, Inc.  
STREET: 1 DNA Way  
CITY: South San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94080

COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Winpatin (Genentech)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/723,931  
FILING DATE: 28-No. 6645775-2000  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 09/052,888  
FILING DATE: 31-Mar-1998  
ATTORNEY/AGENT INFORMATION:  
NAME: Hasak, Janet E.  
REGISTRATION NUMBER: 28, 616  
REFERENCE/DOCKET NUMBER: P1071P1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 650/225-1896  
TELEFAX: 650/952-9881  
INFORMATION FOR SEQ ID NO: 65:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 amino acids  
TYPE: Amino Acid  
TOPOLOGY: Linear  
SEQUENCE DESCRIPTION: SEQ ID NO: 65:  
US-09-723-931-65

Query Match 64.1%; Score 25; DB 4; Length 20;  
Best Local Similarity 57.1%; Pred. No. 91;  
Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 AFTVIGK 8  
||: ||  
DB 14 AFMAVGK 20

RESULT 249  
US-09-723-873-64  
Sequence 64, Application US/09723873  
Patent No. 667305  
GENERAL INFORMATION:  
APPLICANT: Clark, Ross G1  
Lowman, Henry B.  
Robinson, Iain C.A.F.  
TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules  
NUMBER OF SEQUENCES: 109  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Genentech, Inc.  
STREET: 1 DNA Way  
CITY: South San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94080

COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Winpatin (Genentech)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/723,873  
FILING DATE: 28-No. 667305-2000  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/09/052,888  
FILING DATE: 31-Mar-1998  
ATTORNEY/AGENT INFORMATION:  
NAME: Hasak, Janet E.  
REGISTRATION NUMBER: 28, 616  
REFERENCE/DOCKET NUMBER: P1071P1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 650/225-1896  
TELEFAX: 650/952-9881  
INFORMATION FOR SEQ ID NO: 64:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 amino acids  
TYPE: Amino Acid  
TOPOLOGY: Linear  
SEQUENCE DESCRIPTION: SEQ ID NO: 64:  
US-09-723-873-64

Query Match 64.1%; Score 25; DB 4; Length 20;  
Best Local Similarity 57.1%; Pred. No. 91;  
Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 AFTVIGK 8  
||: ||  
DB 14 AFMAVGK 20

RESULT 250  
US-09-723-873-65  
Sequence 65, Application US/09723873  
Patent No. 667305  
GENERAL INFORMATION:  
APPLICANT: Clark, Ross G1  
Lowman, Henry B.  
Robinson, Iain C.A.F.  
TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules  
NUMBER OF SEQUENCES: 109  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Genentech, Inc.  
STREET: 1 DNA Way  
CITY: South San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94080

COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Winpatin (Genentech)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/723,873  
FILING DATE: 28-No. 667305-2000  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/09/052,888  
FILING DATE: 31-Mar-1998  
ATTORNEY/AGENT INFORMATION:  
NAME: Hasak, Janet E.  
REGISTRATION NUMBER: 28, 616  
REFERENCE/DOCKET NUMBER: P1071P1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 650/225-1896  
TELEFAX: 650/952-9881  
INFORMATION FOR SEQ ID NO: 65:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 amino acids

TYPE: Amino Acid  
 TOPOLOGY: Linear  
 SEQUENCE DESCRIPTION: SEQ ID NO: 65:  
 US-09-723-873-65

Query Match 64.1%; Score 25; DB 4; Length 20;  
 Best Local Similarity 57.1%; Pred. No. 91;  
 Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
 QY 2 AFTTICK 8  
 |||: ||  
 Db 14 AFMAVGK 20

Search completed: May 16, 2005, 10:03:40  
 Job time : 42 secs